EDUCATIONAL METHOD

VOLUME XII DECEMBER, 1932 NUMBER 3

CAN WE BE CREATIVE IN SUPERVISION?

ERNEST O. MELBY

Professor of Education, Northwestern University, Evanston, Illinois

Supervision has a new catchword—it is "creative." The word "creative" has superseded "scientific" as this appellation some time ago took precedence over "democracy." Like its precedents, the word "creative" is a vague generalization. Just as supervision never achieved democracy and has had great difficulty in becoming scientific, so it is wholly at a loss to know how to become creative. Even when examples of "creative" supervision are brought in, they almost always turn out to be instances of creative teaching and not supervision. Nevertheless, a series of catchwords such as have successively been used to describe and give theoretical direction to supervision deserve consideration.

That supervision is in a transition stage is evident from the titles which describe writings in the field. "Next Steps in Supervision" and "Supervision at the Crossroads" are examples. In most of current discussion of supervision there is a frank recognition of our failure to arrive at the type of supervision needed. The words "democratic," "scientific," and "creative" are thus only descriptive of the goals and aspirations of those who are engaged in the work of improving instruction in our schools.

OUR EFFORT TO BE DEMOCRATIC

For two decades at least we have sought to achieve democratic supervision. We have assured the teacher that the purpose of supervision was to help and not to inspect. We have characterized the supervisor by the most pleasing adjectives we could find. We have, in short, referred to her as a sympathetic leader and teacher of teachers. What has been the result? Ask any representative group of teachers what they think are the underlying purposes of, let us say, visitation. They will without hesitation say that this purpose is inspection. Soft phrases have not been an effective sugar coating to the bitterness of the supervisory "pill." In spite of volumes written about the supervisor who comes to "help," this supervisor is still received as one who comes to inspect. Supervision may convince us that it has "improved" instruction. It may have been instrumental in modifying or controlling instruction, but it has not achieved democracy. The reaction of the teachers who have been supervised testifies strikingly to this failure.

SCIENTIFIC SUPERVISION

Concerning our more recent efforts to be scientific we have less conclusive data. It

is becoming increasingly evident, however, that our efforts to be scientific in supervision have been the least "scientific" of all our supervisory gestures. We have been so anxious to be scientific that we have tried to stretch science so that it would become a basis for our every act. Such practices can have only one result, that of doing violence to true science. Such "stretchings" of science are evidenced in two different ways. In the first place, supervision has tried to make the schools scientific. Homogeneous grouping and overemphasis upon tests in skill phases of learning are merely examples of the pseudoscientific practices which supervision has foisted upon our schools. In the second place, supervision has sought to employ scientific practices in carrying on its own work. It has endeavored to be impersonal and has only achieved a coldness and disinterestedness not only repugnant to teachers but ineffective as incentives to growth.

Now we are beginning to apply refined statistical treatment to the roughest sort of measures and criteria. The attempt to develop "standards" by which "goodness" of teaching is to be judged is surely not democratic, whatever may in the end be said concerning its right to be termed scientific. The authority of well-established scientific truths will not be resented by teachers. These same teachers will, however, rebel against a domination of precepts based only upon half-baked research.

CREATIVE SUPERVISION

When it comes to creative supervision, we can only talk of the future. The one basis for predicting its success or failure lies in a survey of the conditions under which this new supervision is launched and under which it must operate. Among the more important of these conditions are the administrative organization for instructional improvement, the current concepts of instructional improvement, and finally the techniques in common use. Let us consider them in the order given.

1. The Organization for Supervision

During the last two decades supervision has sought to differentiate itself from administration and to secure recognition as a branch of our educational machinery coordinate with administration. Educational theorists have been attempting to make hairsplitting distinctions between administration and supervision, more to the confusion than to the clarification of the issues involved.

In practice highly differentiated supervisory organizations have been developed. These organizations have functioned with varying degrees of independence from the administrative machinery. In this emergence of supervision as a more or less independent activity a number of influences have been at work. In the first place, the low levels of teacher education and the inadequate preparation of principals have stimulated the practice of employing general supervisory officers who oversee several schools or buildings. In the second place, the many successive additions to the curriculum of the elementary schools have almost forced the employment of many special supervisors, such as those of art and music. The third factor has been a policy in the training of the superintendent. Until very recently we have trained superintendents very largely in the physical, financial, and public relations aspects of administration. We have thus turned out superintendents who in some instances are better qualified to be business managers than educational leaders. It may be that this was necessary in order to overcome the evils of a separation between educational administration and business administration. Its effect, however, has

been that it became perfectly natural for such a superintendent to delegate instructional improvement (real educational leadership) to the so-called supervisory branch of the administrative machinery while he gave his own time to finance, buildings, and community relationships.

The net result of the above-mentioned influences has been the development of very complex organizations for supervision. Essentially these have been agencies for the control of instruction. The rigidity of control has varied from that in the special subjects, where it has been almost purely autocratic, to that of marked tolerance exercised by principals. From the presence in the same organization of persons with widely varying practices and educational philosophies has emerged a difficult problem of integration. In some school systems teachers receive orders from so many different supervisors that overwork and confusion result. All in all our existing organizations for supervision are not healthful nurseries in which to develop creative supervision. One does not become creative under the domination of authority, especially when the authorities disagree. The teacher who has taught her geography lesson by a purposing method at nine o'clock in the morning and then is obliged to use a compulsion method in music at eleven o'clock should not be blamed for failing to exhibit creative tendencies. In one system the administration requires adherence to the time schedule, while the supervisory staff advocates an activity curriculum which takes great liberties with the time schedule. Supervision cannot well be creative unless administration is creative. Administration is not likely to become creative as long as its chief concern is with buildings and finance and as long as instructional leadership is delegated to a coördinate organization. If creative work in the improvement of instruction develops in our schools it will be because superintendents of schools assume creative educational leadership as their all-important function. To make such a leadership effective, changes in our organizations for instructional improvement will be necessary.

2. Our Concepts of Supervision

Present supervisory practices and theories are based upon the assumption of disgracefully low levels of teacher preparation. Our basic concepts of supervision assume that the supervisor knows and the teacher does not. Therefore, the supervisor is to "show the teacher how to teach." Our supervisory activities, our plans of procedure are almost all designed for a school organization in which docile untrained teachers do the bidding of a supposedly wise supervisor. In fact one may say that the history of supervision in American schools is a record of an attempt to make administrative compensation for deficiencies in teacher training. In other words, we have been deluded into thinking that the classroom teacher need have little training or ability as long as we provide a competent supervisor to tell her what to do. In this effort we have no doubt been influenced by industry and its practices. As science has invaded industry, it seems either to have replaced human labor or to have reduced the necessary forms of human labor to the most mechanical or routine types of performance. Science in industry has thus facilitated the modern industrial organization which needs brains only on the part of its executives and which can utilize masses of untrained workers.

The effect of science on education, however, seems to have been just the opposite to that on industry. Every new development in education seems to call for higher skill and ability on the part of the teacher. Measurement, the project method, adapta-

tion of instruction to individual differences are only a few examples of this fact. Incidentally it may be remarked that one of the very important reasons why newer scientific developments in education do not find their way into classrooms more rapidly is that our present teachers lack the training and ability to employ them. It is becoming increasingly evident that the future of the scientific movement in education as well as the future of the so-called "child-centered school" depends upon our ability to provide the right sort of teachers. If child-centered schools employing scientific methods are actually to be developed, we must provide teachers with training at least equal to that possessed by our best educational leaders at the present time. Three years of work beyond college graduation is not too high a standard to set for such teachers. It must be clear to all that the teacher in the new school will have better preparation than the supervisor of the present. How shall such teachers be supervised? It is one thing to govern inferior persons by domination and another thing to lead equals by stimulating association.

Our terminology is not the least of our difficulties. The phrase "creative supervision" carries a serious intrinsic contradiction. Supervision implies oversight—and oversight with the power to control. These connotations are so firmly imbedded in the thinking of teachers that "creative supervision" is futile terminology. To teachers, supervision is not creative, and when it becomes creative it will have ceased to be supervision. If we honestly desire to be creative in our educational leadership, we had better drop the word "supervision" from our educational vocabulary.

3. Supervisory Techniques

The activities we have thus far employed in supervision do not serve the purposes of "creative supervision." These activities are means of control and domination. They are designed for an educational autocracy rather than a professional democracy. The old cycle of *visitation-demonstration-conference-visitation* is not conducive to creative activity on the part of teachers. It makes for a docile conformity. Most supervisors today are so involved in the routine of activities and devices that creative supervision as well as creative teaching is impossible.

Where, then, shall we look for leads to activities and devices for use in creative supervision? We shall not find them in the now well-developed supervisory routine of the elementary school. Rather we shall find our suggestions in places where our supervision specialists would refuse to look, namely, in high schools and universities. In our high schools, teacher-initiated and teacher-conducted activities for instructional improvement are developing. In our universities staff members are being stimulated to study their own teaching and seek its improvement. In high schools our teachers "know" as much as our principals and in universities our professors "know" as much as our deans. Likewise, in our new schools our teachers will "know" as much as our supervisors. To be sure, the activities for instructional improvement now going on in high schools and universities are fragmentary and embryonic. They are, however, richer in suggestion for creative supervision than are the activities of our dominating supervisory hierarchy in the elementary schools.

SUMMARY

We may summarize by pointing out that in supervision we have tried hard to be democratic and we have failed. We have endeavored to be scientific and have in the process become more unscientific and

ineffective. Now we are urged to be creative. Can we become so? Perhaps, if the major obstacles can be overcome. If we can train superintendents who are educators rather than business managers we may secure for our schools a creative leadership. If in turn such superintendents can rid our schools of the restricting influence of the hierarchy of general and special supervisors and employ principals and assistant superintendents who are educational leaders, we may achieve, if not creative supervision, at least creative administration. If we can educate teachers who can employ our newer methods, we may also achieve creative teaching.

Perhaps if we stop using the word supervision we shall not only save ourselves the trouble and confusion resulting from attempts to make distinctions between administration and supervision but we shall also not constantly remind teachers of an offensive form of oversight with which our schools were once afflicted. We have not always been creative in administration, but teachers feel more kindly toward superintendents and principals than they do toward persons who carry the title of supervisor.

Finally, we shall have to develop a new approach in supervision, making use of different activities. It is perhaps too early to say what these activities will be. One thing, however, seems clear and that is that the new activities and devices will not be means of inspection or demonstration but rather means of stimulation and assistance to teachers who are themselves engaged in the improvement of their own teaching. In other words, we need activities and devices whereby creative leadership may become effective. Whenever this leadership is ready to confer with teachers as professional equals and in all humility approach the various problems in an earnest search for truth, we shall have no need for "supervision" or "supervisors" and creative educational leadership will have become, if not a reality, at least a possibility.

There is, of course, no thought of giving up our efforts to improve instruction. These must go on with renewed vigor and effectiveness. The point is that, if such efforts are really to be creative, the organization, its philosophy and its activities, must be radically modified.

THE EFFECTIVENESS OF VARIOUS TYPES OF CLASSROOM INCENTIVES

ROBERT A. DAVIS AND C. R. BALLARD

University of Colorado

The term incentive is used in education to describe both the incentive device and the attitude produced by it. The device refers to the means employed by the teacher and school to evoke attitudes which are conducive to learning. From the standpoint of the function of the school, incentives are artificial devices introduced into methods of teaching for the purpose of stimulating the activity of pupils. These incentives may consist in objectively revealing pupil achievement at definite intervals, or they may take the form of encouragement or discouragement, competition and coöperation. Other types which are important in life but not of particular significance in the function of the school include hunger, physical pain, sex expression, and other basic tendencies of the individual.

Three general types of incentives which are recognized as significant in the classroom may be designated as intellectual, emotional, and social in nature. Intellectual incentives refer to those devices which deal with the method of informing pupils of success or failure, or working with knowledge of results as compared with working without knowledge. The emotional incentives include those devices which employ encouragement or discouragement, praise and reproof. In this group the student may not be informed of his success or failure but rather be influenced by expressions of praise and reproof for his performance. The social incentives embrace those devices which influence the performance of the pupil when he is working in a social situation. The pupil may compete with other members of his class or he may compete with his own record. The majority of teachers use at one time or another all of these incentives as motivating factors.

The results represent a summary of the important objective investigations which deal with those incentives employed by the teacher and school. An examination of the bibliography will reveal that investigation in this field was hardly known before 1920, when there is a marked increase in the amount of research which has been produced. The investigations reviewed have been classified and presented according to the experimental factors tested, the number and character of the subjects used, the method of research and the results obtained.

1. *Intellectual incentives.* Does awareness of success or failure influence the pupil's subsequent performance? It has been suggested that the reason that the pupil usually makes greater improvement when working in a laboratory situation than in the classroom is because he is always conscious of his success or failure. The teacher is no longer justified in excusing herself for not having available yardsticks which may be used to objectify the pupil's present standing and demonstrate his rate of growth. The numerous experiments which use this type of incentive have been made possible largely through the use of objective tests.

TABLE I

SOME EXPERIMENTAL STUDIES DEALING WITH INCENTIVES OF AN INTELLECTUAL NATURE

Study	Experimental Factors	Method	Findings
1.*	Knowledge of intellectual level	Subjects (297) in Grades 6, 9, 12 and college freshmen used. Two-group technique employed, one group being informed of the scores made on an initial test and improvement measured by subsequent tests. The results of the experiment are compared with others, with opinion from questionnaire study, and from statements of persons who had been told their intelligence quotients.	Knowledge of intellectual level made no appreciable difference.
2.	Knowledge of results	Three mature students remain in complete ignorance of success or failure. At another time full knowledge of progress. Bergstrom Ergograph used to measure improvement.	Amount and rate of work greater with knowledge of results.
3.	Knowledge of results	Subjects were 3 mature students. Data obtained by means of Bergstrom Ergograph.	Amount and rate of work greater with knowledge of results.
4.	Interest and knowledge of results	College students (124) used as subjects. Four simple learning tests were given. The subjects were divided into two groups. One group was kept informed of its progress and effort made to keep it interested. After 50 trials the procedure was reversed.	All members of the experimental groups improved more rapidly in speed and accuracy than those used as control.
5.	Knowledge of results	Children (36) in Grade 5A—one group worked under normal class conditions, another external stimulation. This consisted in daily published records for each individual. Class improvement shown by graph and credit given in form of stars.	The incentives exerted a marked positive effect on the amount of the product. Only in one test did the non-motivated group do as well as the motivated group.
6.	Knowledge of results	Three parallel sections of college freshmen. Otis Self-Administering Test of Mental Ability was given.	Significant increase in average score when daily written exercises to measure success were given, provided the student attitude was favorable to the proceedings.

* Numbers refer to bibliography.

Study	Experimental Factors	Method	Findings
7.	Knowledge of results in grading handwriting	The grading of handwriting samples was performed by college students. On four successive periods 10 samples were graded without reference to a scale or previous gradings. Later gradings compared with scale.	The effect of comparing scores given with the true values as measured on the Thorndike scale was to greatly improve the grading proficiency.
8.	Punishment, reward, knowledge of results	The technique involved length discriminations as measured on the Galton bar. Sixty college students were divided into six groups of ten each and motivated as follows: punishment, reward, control, guess-with-punishment, told-with-punishment, knowledge.	Reward and punishment not reliably different. Knowledge of specific error together with punishment was no more effective than reward or punishment alone. Definite knowledge alone was as effective as reward or punishment alone.
9.	Knowledge of results on oral and silent reading	26 college students worked in pairs, each presumably equal in ability. While one read certain designated passages, the other kept time. The number of ideas in the written report was used to measure the results.	Knowledge of results shown in a definite and systematic manner of great importance. It increases activity and lessens discouragement.
10.	Honor rolls	All the pupils of one high school as subjects. Three honor rolls consisting of pupils with grades 90 or better, grades 80–89, and grades 80–84. Special methods of recognition used.	Scholarship, interest, and spirit noticeably increased.
11.	Examinations	74 to 126 college subjects used. True-false, multiple choice, and essay questions were asked. One group was given a pre-examination before any opportunity for study and review had been given. Different methods of pre-examinations were tried.	Multiple choice and essay type questions constitute an active stimulus to learning. Direct interrogating is more intense stimulus than a narrative statement.
12.	Knowledge of results	One subject used. A table was divided by a screen. A line ran at an angle from the subject seated at the table. The subject attempted to place a dot behind the screen on a point which would fall on the continuation of the line.	No learning without knowledge of results.
13.	Strong motivation under conditions of fatigue	Ten college freshmen and 54 juniors. The freshmen were undergoing fraternity initiation and were permitted only two hours sleep	The fatigued but strongly motivated freshmen performed twice as much work

Study	Experimental Factors	Method	Findings
		a day. At the end of six days the initiates were given the Thorndike addition test and were told that the results would affect their chance for membership in the fraternity. The results were compared with scores from the same test given to 54 juniors.	as the rested, unmotivated juniors.
14.	Exemption of pupils	204 pupils in grades 4, 5, and 6 were divided into three groups. Preliminary and final tests were given.	Exemption increased both speed and quality of performance.
15.	Learning against time	26 college girls were divided into two sections. The test was repeated with 24 other girls. The test consisted in memorizing several lists of words. One group was limited in learning time and the other was not.	The group limited in time far surpassed the other in speed of learning.
16.	Knowledge of results	Two groups of fourth grade arithmetic pupils—one of which worked without knowledge of results, the other kept daily informed by use of standards as to growth.	Clear advantage resulted in the use of individual and class progress charts and particularly with the brighter pupils. Is equally advantageous for boys and girls.
17.	Knowledge of results	59 college students were divided into four groups, each consisting of three sections. One section of each group was kept informed as to its progress from day to day, while another section of each group had a partial knowledge, while the third was given no information.	Pupils with knowledge of results distinctly superior, the degree of superiority being roughly in proportion to the amount of information.
18.	Final examinations	Four college students. During each term one class expected a final examination and another did not.	Knowledge of final examination produces worthwhile results.
19.	Knowledge of results	Repetition of Judd's experiment.	Three of the four subjects made some improvement without knowledge of results.
20.	"How to Study"	"How to Study" was made the chief center of interest in a course in educational psychol-	Practice is more effective motivation. The plan of

Study	Experimental Factors	Method	Findings
		ogy with 45 undergraduates. A special effort was made to promote pupil participation in analyzing study factors.	having students judge their own capabilities notably increased interest.
21.	No motivation, test motivation, and intrinsic motivation	709 pupils in the sixth grade were the subjects. The three experimental factors were applied, one each to three groups. Charters' Diagnostic Test was used in initial and final tests.	Practice is more effective than any type or combination of motives. Test motivation more effective than intrinsic.
22.	Some incentives on work and fatigue	Three series of experiments were conducted to compare quantitatively the amounts of work done by four experienced laboratory workers with a definite task to perform, or with no definite aim.	More work and less fatigue when there is a definite aim in view. Known impossible requirements decrease total results.

One of the first observations that may be made from Table I is that the practice of showing a pupil his success or failure in an examination, test, or course is decidedly advantageous as a means of motivating his work. When pupils are informed of their errors and successes there is a definite attempt to achieve better methods of work and to improve their attitude. Accurate records of the daily progress of pupils with opportunity for comparison of their own present records with previous attainments gives personal meaning to the child's school work. When pupils are informed concerning the quantity and quality of their performance of tasks, their activity assumes significance and they work with definite aims and purposes in mind.

2. *Emotional incentives.* Another group of incentives include those devices which are predominantly emotional in character. Examples of this type of incentive are found in studies which use praise and reproof, encouragement and discouragement as motivating devices. In this type of incentive the teacher employs verbal commendation or censure as a means of influencing the pupil's work. It is one thing to inform the pupil of his progress in an objective way and still another to praise or reprove him for good or poor performance. It is clear that the two types of incentives may have the effect of producing the same kind of reaction in the pupil, but the devices are significantly different. When intellectual incentives are employed the pupil is able to diagnose his own success or failure and become motivated as a result of his own intellectual efforts. It is a matter largely of presenting facts without comment. On the other hand, when emotional incentives are used there is verbal commendation or censure which is intended to produce some sort of emotional response within the pupil.

Teachers have always employed sarcasm, commendation, and censure as a means of stimulating pupils. The early schoolmasters of this country employed censure and sarcasm as the chief means of influ-

TABLE II

SOME EXPERIMENTAL STUDIES DEALING WITH INCENTIVES OF AN EMOTIONAL NATURE

Study	Experimental Factors	Method	Findings
1.*	Praise and censure	Three hundred graduate students given the Laird list of incentives, plus two others, and asked to indicate those to which they had responded positively or negatively.	Convincing evidence that commendation, praise, and encouragement are superior to censure, ridicule, threats, and punishment.
2.	Encouragement and discouragement	Seventy-four college students were divided into three equal groups. Motor coordination test and color naming test used.	On motor coordination tests encouragement ranked first, discouragement, second, no comment, third; on color naming test, first two results reversed.
3.	Praise and reproof	Fifty college students as subjects. Whole group given Courtis English Test 4B. The class was then divided into 2 groups and experimental factors applied.	Praised group improved 79 per cent. Reproved group did poorer in final than in initial test.
4.	Praise and reproof	One hundred and six subjects in Grades 4 and 6. Experiment continued over considerable time. Modifications of the Courtis Research Tests in arithmetic addition were used.	Praised group showed greatest improvement. Ignored group the lowest improvement. Girls responded better to praise than boys. Age of children made little difference in results.
5.	Praise and reproof	Two hundred and fifty-seven white and 151 colored children in Grades 3, 5, and 8 were subjects. Intelligence tests were used to measure improvement. Grades 5 and 8 were given the National Group Intelligence Test, Scale B, forms 1 and 2, Grade 3 was given Otis Intelligence Test, forms A and B.	Both praise and reproof effective. Older children respond better to either than younger children. Boys respond better to reproof than girls. Praise somewhat better for inferior children and reproof for superior children. Negro children respond more favorably to praise and white children to reproof; difference, however, is slight. Children reported that they worked with more enjoy-

* Numbers refer to bibliography.

Study	Experimental Factors	Method	Findings
			ment after praise and that praise had more lasting effect.
6.	Various incentives (effect on high-school students)	Ninety-two college freshmen and sophomores were asked to think back and report in detail their actual responses to different incentives used by high-school teachers. Sixteen incentives were listed and studied.	Reprimands, ridicule, sarcasm, low grades, and additional assignments reduced effort rather than increased it. All other incentives reported increased fervor to work.
7.	Various incentives (effect on college students)	Same students as above were asked to list incentives used by college teachers to which they responded positively or negatively.	Results practically the same as in above experiment.
8.	Punishment	Eighty college students divided into two groups. One learned a maze by simple trial and error without punishment. The other group was punished by electric shock for errors made in the maze.	Fifty per cent decrease in number of trials to learn the maze due to shock, also 30 per cent decrease in time, 34 per cent increase in time per trial, and 30 per cent decrease in number of errors.

encing pupils to take their work seriously. School work was something to be endured and pupils were not expected to receive encouragement from their teachers. Commendation of good performance smacked of soft pedagogy, and pupils were thought to become egotistical if they received encouragement from their superiors. This practice of making school work unpleasant was not only common among early teachers, but it exists in many places today where pupils may never feel that they are succeeding.

From a review of the studies dealing with emotional incentives certain principles are established. Praise is better than reproof as an incentive to diligent work. It has been observed that both praise and reproof may be effectively employed as motivating influences, but praise is better from the standpoint of both immediate and remote returns. It should be noted that too much praise will defeat the purpose for which it is intended. In some instances the teacher who continues to commend work of any quality may find that she is endangering her own status in the mind of the pupil. The extent to which praise and reproof may be used is also governed by individual differences in pupils and teachers. Some pupils respond better to censure than to praise, and there are some teachers who, because of certain personality traits, can neither commend nor reprove pupils in an effective fashion. It is also clear that it is better to make some comment, regardless of its character, about a pupil's work than to assume a neutral attitude.

TABLE III

SOME EXPERIMENTAL STUDIES DEALING WITH INCENTIVES OF A SOCIAL NATURE

Study	Experimental Factors	Method	Findings
1.*	Group upon association and thought	The experimental groups contained from 3 to 5 members each. Rivalry was eliminated. 26 upperclassmen and graduate students used.	Presence of a co-working group favorable to speed and progress of association. Increased flow of thought in the group though solitary work produces greater depth of thought.
2.	Group effects	Twenty to 36 college students paired on basis of scores on Thorndike test. 4 tests were used: (1) Ohio State University, Form 10, part 5 (2 and 3), Forms A and B of Terman group test, and (4) the Otis Self-administering Test. One "group" of students worked alone, another in assemblage.	No consistent group effect. Students working alone slightly superior on difficult items.
3.	Audience upon performance	The reactions of college women in presence of one person or 30 to 40 persons were measured. The effects of certain kinds of groups such as fellow-students, etc., were observed.	Presence or absence of spectators had little effect. Size of audience had no effect except in most difficult tests. The superior individuals affected more by audience than average individuals.
4.	Group rivalry	One hundred and fifty-five children in Grades 4 and 6 given a modification of the Courtis Research Tests in arithmetic addition. Experimental and control-group technique used.	Rivalry group gained 41 per cent over control group. Girls and boys nearly equal. Fourth grade children responded better than sixth grade. Inferior children better than superior. Rivalry group gained in accuracy while control group lost.
5.	Coöperation and competition	One thousand five hundred and thirty-eight subjects in Grades 5–8 inclusive, 814 children in experimental group, 724 in control group. Addition tests (1) unmotivated, (2) self-motivated (individual prizes awarded, (3) group motivated (contest be-	(1) Self-motivated consistently most effective. (2) 74 per cent chose the self-motive. (3) Homogeneity a factor in coöperation. Girls lower than boys in coöpera-

* Numbers refer to bibliography.

Study	Experimental Factors	Method	Findings
		tween classes), (4) opportunity given to work for self or class.	tion involving speed, but in free choice, a larger percentage of girls than boys chose the group.
6.	Verbal suggestion on perseverance	Sixty-five subjects 6 to 16 years of age given a simple puzzle box. Each child told that by proper manipulation the box could be opened. Actually, it could not. Each child made two efforts to open the box, the time spent in effort was recorded. The verbal suggestion was given at beginning the second trial, "I am sure you can get the box open."	Suggestion most effective with youngest and oldest children. Spontaneous perseverance before suggestion was given unrelated to age of child.
7.	Individual and group rivalry	One hundred and twenty-six college students divided into three sections equated on basis of initial scores. Section 1—control, 2—motivated by group, 3—individually motivated. Tests in substitution and in rate of reading were used.	Individual motivation superior to group motivation while the latter is only slightly superior to no motivation.
8.	Small audience on eye-hand coördination	The Koerth eye-hand coördination test was used; 22 college students were subjects. The audience consisted of from 4 to 8 upperclassmen and graduate students.	Definite indication of superior score due to audience influence.
9.	Group influence on stutterer's speed in free association	Twenty-five subjects used. Followed Allport's method—two groups of 5 individuals each arranged. Free associations were aroused by stimulus word. The same stimulus words were employed under two conditions.	Conclusion contradictory to Allport's. Subjects show superiority in number of associations when working alone.
10.	Group vs. individual thinking	Subjects, 108 graduate students in education. The efficiency of a group was compared with the performance of the same individuals working alone. The task was to make up words out of the letters of a given word.	Group thinking superior to average of even best members of group working alone. Group product, in groups numbering up to 10, is superior to individual production.
11.	Influence of group upon psychological test scores	Ten college upperclassmen were paired and assigned supposedly equal test forms, one group taking Form I alone and then Form II in a group. The other group reversed the process.	Means for group were significantly higher than those working alone.

Study	Experimental Factors	Method	Findings
12.	Competition	Subjects, 4 college women and 8 college men. Task consisted of printing with individual rubber types. First were told "Do your best—but not aim to beat your fellow workers." Next were told, "Beat your fellow workers—compete!"	Average percentile gain under competition over non-competition is 26. Quality of work better under non-competition. Homogeneity of group with respect to quality is about the same under conditions of group and individual competition.

With younger and less mature pupils, praise is likely to be more effective than reproof, while with older and more mature pupils reproof can be administered to greater advantage. As a rule, dull pupils appear to be more affected by praise and bright pupils by reproof. Boys appear to be more influenced by reproof and girls by praise. The positive incentives are better than negative incentives for all ages, grades, and levels of intelligence.

3. *Social incentives.* In this country mass instruction predominates; and with the rapid growth of the school population, and the consequent attempt to economize in school administration, it would appear that classes will be even larger in the future. Viewing this situation with incentives in mind, it is pertinent to inquire if the child who receives instruction in a social situation has any advantages or limitations from the viewpoint of motivation. The term social is used because the pupil is responding in a co-working group. Do individuals work more efficiently in the presence of groups than alone? Is individual rivalry more effective than group rivalry? And what is the significance of a competitive consciousness? Answers to these questions have an important bearing upon the social aspects of mass instruction and on class and individual rivalry.

The conclusions from the objective studies bearing on social incentives in general point in the same direction. The presence of a co-working group has the effect of increasing the number of ideas and speed of the individual, but the quality of the thought processes is usually superior when the performer is working alone. The influence of the presence of a co-working group varies according to the type and difficulty of the materials studied. In general pupils may be expected to perform in certain mechanical and speed tasks more efficiently when with a co-working group than when alone, but in those tasks of a difficult nature which require the exercise of the higher mental processes, to work individually is productive of better results. When quantity is the end in view, the presence of a co-working group is probably always beneficial, but when judgment and reasoning are involved or when the materials studied are difficult in nature, working alone appears to be superior.

Psychology indicates that the individualistic or self-preservative tendencies are basic impulses in every individual. The individualistic motive produces far greater results than the social or coöperative mo-

tive. Individuals tend to improve to a greater extent when they are working for self than when working for the group of which they are members. Rivalry with one's own record and for prizes set up for the individual is superior to group rivalry. Whether this is a desirable tendency or not depends upon our interpretation of the value of competition and coöperation. It is possible that both school and society have emphasized competition at the expense of coöperation; and if coöperation is a desired trait, opportunity must be provided for pupils to practice and exercise cooperation. As the school is now conducted opportunity is given for the development of competition.

Bibliography

I. Intellectual Incentives.

1. Allen, C. M., *Effects Produced in an Individual by a Knowledge of His Own Intellectual Level.* Teachers College Cont. Ed. No. 401, pp. 90.
2. Arps, G. F., "Report on Work with Knowledge Versus Work without Knowledge of Results." *Psy. Rev.,* Vol. XXIV, 1917, pp. 449-455.
3. Arps, G. F., "Work with Knowledge of Results Versus Work without Knowledge of Results." *Psy. Rev. Mon.,* Vol. XXVIII, No. 3, 1920, p. 41.
4. Book, W. F. and Norvell, Lee, "The Will to Learn." *Ped. Sem.,* Vol. XXIX, 1922, pp. 305-362.
5. Chapman, J. C. and Feder, R. B., "The Effect of External Incentives on Improvement." *J. Ed. Psy.,* Vol. VIII, 1917, pp. 469-474.
6. Deputy, E. C., "Knowledge of Success as a Motivating Influence in College." *J. Ed. Resear.,* Vol. XX, 1929, pp. 327-334.
7. Gilliland, A. R., "The Effect of Practice With and Without Knowledge of Results in Grading Handwriting." *J. Ed. Psy.,* Vol. XVI, 1925, pp. 532-536.
8. Hamilton, H. C., "The Effect of Incentives on Accuracy and Discrimination as Measured on the Galton Bar." *Archiv. Psy.,* Vol. XVI, 1929, pp. 103-173.
9. Harrelson, P. V., "The Effect of Knowledge of Results in Oral and Silent Reading." *Peabody J. of Ed.,* Vol. I, 1923-24, pp. 78-85.
10. Holmes, Chester W., "Honor Rolls as an Aid to Scholarship." *School Rev.,* Vol. XXXVI, 1928, pp. 465-468.
11. Jersild, A. T., "Examination as an Aid to Learning." *J. Ed. Psy.,* Vol. XX, 1929, pp. 602-609.
12. Judd, C. H., "Practice Without Knowledge of Results." *Psy. Rev. Mon. Supp.,* Vol. VII, 1905, pp. 185-199.
13. Knight, F. B. and Remmers, H. H., "Fluctuation in Mental Production When Motivation Is the Main Variable." *J. Appl. Psy.,* Vol. VII, 1923, pp. 209-223.
14. Mead, Cyrus, "The Effect of Exempting Pupils Proficient in Handwriting." *J. Ed. Psy.,* Vol. X, 1919, pp. 219-228.
15. Myers, G. C., "Learning Against Time." *J. Ed. Psy.,* Vol. VI, 1915, pp. 115-116.
16. Panlasgui, I. and Knight, F. B., "The Effect of Awareness of Success or Failure." *N. S. S. E.,* Vol. XV, Part II, 1929, pp. 611-620.
17. Ross, C. C., "An Experiment in Motivation." *J. Ed. Psy.,* Vol. XVIII, 1927, pp. 337-346.
18. Schutts, T. H., "Is There Value in the Final Examination?" *J. Ed. Resear.,* Vol. XII, 1925, pp. 204-213.
19. Spencer, L. T., "Effect of Practice without Knowledge of Results." *Am. J. Psy.,* Vol. XXXIV, 1923, pp. 107-111.
20. Stone, C. W. and Colvin, C. C., "How to Study as a Source of Motive in Educational Psychology." *J. Ed. Psy.,* Vol. XI, 1920, pp. 348-355.
21. Symonds, P. M. and Chase, D. H., "Practice Versus Motivation." *J. Ed. Psy.,* Vol. XX, 1929, pp. 19-36.
22. Wright, W. R., "Some Effects on Incentives of Work and Fatigue." *Psy. Rev.,* Vol. XII, 1906, pp. 23-24.

II. Emotional Incentives.

1. Briggs, T. H., "Praise and Censure as Incentives." *Sch. and Soc.*, Vol. XXVI, 1927, pp. 596-598.
2. Gates, G. S. and Rissland, Louise, "The Effects of Encouragement and Discouragement upon Performance." *J. Ed. Psy.*, Vol. XIV, 1923, pp. 21-26.
3. Gilchrist, E. P., "The Extent to Which Praise and Reproof Effect a Pupil's Work." *Sch. and Soc.*, Vol. IV, 1916, pp. 872-874.
4. Hurlock, E. B., "The Value of Praise and Reproof as Incentives for Children." *Archiv. Psy.*, Vol. XI, 1924-25, No. 71, p. 78.
5. Hurlock, E. B., "An Evaluation of Certain Incentives Used in School Work." *J. Ed. Psy.*, Vol. XVI, 1925, pp. 145-149.
6. Laird, D. A., "How the High School Student Responds to Different Incentives to Work." *Ped. Sem.*, Vol. XXX, 1923, pp. 358-365.
7. Laird, D. A., "How the College Student Responds to Different Incentives to Work." *Ped. Sem.*, Vol. XXX, 1923, pp. 366-370.
8. Rexroad, C. N., "Administering Electric Shock for Inaccuracy in Continuous Multiple Choice Reactions." *J. Exp. Psy.*, Vol. IX, 1926, pp. 1-16.

III. Social Incentives.

1. Allport, F. H., "The Influence of the Group upon Association and Thought." *J. Exp. Psy.*, Vol. XI, 1929, pp. 159-192.
2. Farnsworth, P. R., "Concerning So-called Group Effects." *Ped. Sem.*, Vol. XXXV, 1928, pp. 587-594.
3. Gates, Georgina S., "The Effect of an Audience upon Performance." *J. Abnor. and Soc. Psy.*, Vol. XVII, 1923-24, pp. 334-341.
4. Hurlock, E. F., "The Use of Group Rivalry as an Incentive." *J. Abnor. and Soc. Psy.*, Vol. XXII, 1928, pp. 278-290.
5. Maller, J. B., *Coöperation and Competition.* Teachers College Cont. Ed., No. 384, pp. 173.
6. Sherman, Irene, "Effect of Verbal Suggestion upon Perseverance." *Psy. Clin.*, Vol. XVII, 1928-29, pp. 210-213.
7. Sims, Verna M., "The Relative Influence of Two Types of Motivation on Improvement." *J. Ed. Psy.*, Vol. XIX, 1928, pp. 480-484.
8. Travis, Edward L., "The Effect of a Small Audience on Eye-Hand Coördination." *J. Abnor. and Soc. Psy.*, Vol. XX, 1925-26, pp. 142-146.
9. Travis, Edward L., "The Influence of the Group upon the Stutterer's Speed in Free Association." *J. Abnor. and Soc. Psy.*, Vol. XXIII, 1928-29, pp. 45-51.
10. Watson, G. B., "Do Groups Think More Efficiently Than Individuals?" *J. Abnor. and Soc. Psy.*, Vol. XIX, 1924-25, pp. 236-253.
11. Weston, A. B. and English, H. B., "The Influence of the Group on Psychological Test Scores." *Am. J. Psy.*, Vol. XXXVII, 1926, pp. 600-602.
12. Whittemore, I. G., "Influence of Competition on Performance." *J. Abnor and Soc. Psy.*, Vol. XIX, 1924-25, pp 236-263.

ILLUSTRATIONS OF CREATIVE ABILITY IN LANGUAGE

BIRDIE A. BELSER

Supervising Critic, Primary Grades, State Teachers College, Livingston, Alabama

With the acceptance of the theory of growth through self-activity, the progressive teacher has focused her attention upon ways and means of stimulating and guiding self-activity. She has asked herself:

"What are the inborn characteristics or tendencies of the young child which cause activity or effort?

"What are the outside influences which set these tendencies in motion?

"How can the activities be guided toward results that are satisfying to the child and to society?"

Through this process of analysis, reasoning, and observation the teacher discovers that every growing child enjoys exercising his natural impulses to know and to create through communication, expression, and investigation. She also discovers that environmental factors have a great deal to do with the stimulation and guidance of these natural impulses—the genuine comradeship of teacher and fellow pupils, the beauty and orderliness of schoolroom and playground, the pictures and books and plastic materials—in short, all of the experiences of everyday life which are used in ways that make for seeing eyes, listening ears, and an eagerness to share with others.

This sharing often brings with it the thrill of authorship. The glow with which small children relate satisfying experiences bears witness that interest goes beyond appreciation into active effort to create language values. It is the responsibility of the school to provide for its children both constant stimuli to creative effort and wide opportunity for satisfying creative impulses. For such stimuli the teacher must be responsible.

The illustrations given here constitute an attempt to show how a group of elementary teachers tried to fulfill this obligation. Some of the results are crude, it is true, but when the previous opportunities and the widely varying abilities of the children are considered, the results are gratifying.

Preparation for assembly programs, the class magazine from which especially good pieces of work were often selected for the school newspaper, "Whispers of Cloverdale," the making of individual and group booklets, the planning of programs to entertain mothers or other grades, the keeping of interesting records, and the joy of conversing with each other were opportunities giving rise to much of the work.

The approach to the first piece of work presented from the first grade was through coöperative effort to make a play for the assembly program on November the eleventh. One child said that he knew about that day, that his father had been in the war and had told him about it. After a little discussion the children decided to make a play about "The Winners of the World War."

In response to the question, "Who were the winners of the World War?" soldiers, nurses, doctors, farmers, and mothers were suggested as characters. The children had sung and marched to Marie Hofer's "Soldier Boy," so one child said, "Let's use our soldier song in the play." It was decided that the soldiers could march in

singing that song, but what should the other characters do?

"We could make a song for them," said one child.

The children decided to try making a song to the tune of "Mulberry Bush." This is the song they made and used:

We are Red Cross nurses, nurses, nurses,
We are Red Cross nurses,
We were willing to do our part.
We nursed the sick soldiers, soldiers, soldiers,
We nursed the sick soldiers,
We were willing to do our part.

We are the doctors, doctors, doctors,
We are the doctors,
We were willing to do our part.
We worked and studied and did our part, did our part, did our part.
We worked and studied and did our part
To keep the soldiers well.

We are the farmers, farmers, farmers,
We are the farmers.
We were willing to give the food.
We plowed and hoed, and planted seed, planted seed, planted seed,
We plowed and hoed and planted seed;
We were willing to do our part.

We are the mothers, mothers, mothers,
We are the mothers.
We gave the soldier boys.
We worked and served and made their clothes, made their clothes, made their clothes;
We worked and served and made their clothes;
We were willing to do our part.

The soldiers marched again and the other children sang to them as they marched:

Here are our soldiers, soldiers, soldiers,
Here are our soldiers.
They have been brave and true;
They fought to make our country free, country free, country free,
They fought to make our country free,
They were willing to do their part.

The flag salute was given and the play closed by having the whole assembly stand and sing one stanza of *The Star-Spangled Banner.*

A coöperative story grew out of an experience which pleased the children. The janitor brought a humming bird to the first grade room, saying that the bird had fallen and he thought the children would like to see it. The teacher said, "After you have looked at the humming bird, you may ask questions or tell us some interesting thing which you have noticed." The following story for the class magazine was the result.

Our Humming Bird

Fletcher brought us a humming bird.
It was a baby bird.
We made a nest for it in a box.
The humming bird has a green back.
It has a long black bill and little black feet.
Mary Frances sang a song about the humming bird.
She made the song.

Springtime, birds, and pets called forth the following rhymes some of which were published in the school paper:

The Little Bird

There is a little bird
In her nest
Sh! Do not scare her—
Let her rest.

My Rabbit

Once I had a little rabbit,
Nothing would he eat
But a silver turnip
And a golden beet.

Springtime

Spring is coming, the robins say,
And we will build our nest today,
Out in the cherry trees we will build them you know
Just as we built them long, long ago.

SPRING

Spring is here.
Now you can go out in the sunshine bright
And hear little birds singing with all their might.

Some rhymes made just for fun were:

I did not go far
In my old Ford car.

My little dog Dash
Ate up the hash.

Sometimes I run
Just for fun.

The following prose expressions indicate the experiences which gave rise to them:

OUR JACK-O-LANTERN

We had a Hallowe'en party.
We made a Jack-o-Lantern.
We ate apples.

A BUBBLE PARTY

We had a party.
It was a bubble party.
We blew some little bubbles.
We blew some middle-sized bubbles.
We blew some big bubbles.
A big bubble floated out of the window.

OUR SAND TURTLE

A boy brought a turtle to school and gave him to the first grade. We first put the turtle in the waste basket. Then we got a box of sand and put him in that. We put a pan of water in the sand.

Sometimes the turtle steps in the water. He often digs a hole in the sand.

One day we found the turtle out of the box. He had crawled under the radiator.

He likes to stick up his head and listen to the music.

A turtle carries his house on his back. It is his shell.

Dear John:

Phil brought a cocoon to school today. It is brown. It is a moth cocoon. We hope you will be here when the moth comes out.

The white rat did a funny thing last night. He pulled Patricia's Easter chickens and the grass into his cage and made a nest.

Your friend,
GRATTAN.

The illustrations from the second grade are expressions of feeling and thinking in response to experiences in nature study.

BEES

Bee, buzz and sing!
When I hear you coming
I run away
For I'm afraid you'll sting.

ANEMONE

Little white anemone
You are as dainty
as dainty can be;
And when the wind blows
You dance and sway
at the foot of a tree.

SPRING BEAUTY

Dear little flower so dainty and pink
You close your eyes when the sun does sink.
Then again when the morning sun does rise,
You open your cunning little eyes.

BLUETS

I saw some little flowers
As blue as could be.
The sun shone upon them
And they looked at me.

PURPLE TRILLIUM

Beautiful Purple Trillium
Growing in the shade,
We must not disturb you
With hoe, shovel, or spade.

We must let you live
The world to beautify,
Beautiful Purple Trillium,
May you never die.

In mid-winter a most unusual thing happened. Snow fell for two days and lay several inches deep upon the ground. The

third grade teacher chose this time to study Eskimos. The children's record of the unit contained the following rhymes made by individual children and selected by the group as those which should be included:

Eskimo Land

We have had snow so we played that we were Eskimos. We took a trip to Greenland and here are some of the rhymes we made:

Up in the North where it is cold
Live the Eskimos fearless and bold.
The polar bear is white as snow
So he lives with the Eskimo.

Eskimos are not cold in their igloos of ice.
They are used to it, so they think it is nice.

We, the twins of long ago,
Had a good time in the ice and snow
Playing with our dogs and Eskimo sleds
Turning tumblesaults and standing on our heads.

Let us go to the land of the Eskimo
We'll visit the land of ice and snow.
We will travel for weeks and days
To have a nice ride in one of their sleighs.

Long ago in the ice and snow
I used to play with my dog Bim Bow.
He would chase the bears and jump on a sled,
He would run pell-mell until it was time for bed.

The polar bear lives in the cold land
For food he catches what he can.
His coat is warm and as white as snow,
He does not care how hard the winds blow.

Experiences all the way from Christmas toys to the history stories of Alabama required in the course of study were basic to the selections given from the fourth grade.

Christmas Toys

I keep thinking so much
Of my toys and such.
Oh, my! I will have a score
But baby sister will have more.
A toy dog and a toy cat,
A toy monk and a toy rat,
A toy doll and a big toy bell,
And a live frog I got out of the well.

Her toy dog will go bow, wow, wow,
The pretty cat will go meow, meow,
The toy monkey will climb and climb,
And the bad little rat will squeak out a rhyme.

To My Teacher

Who is the best teacher in the world?
Don't let your head get in a whirl—
Just ask any fourth grade boy or girl.
Miss Thornton!

Who is so pretty and so sweet?
Who has such dainty little feet?
Miss Thornton!

Who has cheeks so rosy and red?
Who has a pretty, curly head?
Miss Thornton!

To and Fro

I see the ants go to and fro,
But where they go I do not know.
I see a bird on the wing
And many another fleeting thing.
I see the little butterfly
As it quickly passes by.
I see the dog chase the cat
And the cat after a rat.
I wonder why!

Alabama Day

Alabama Day is on December 14. We invited Mr. Brannon of the State Department of Archives and History to come out and tell us about Alabama. He came and brought Indian beads and pots and some interesting pictures.

Here are some of the things we learned.

On December the fourteenth, 1819, Alabama was admitted to the Union as a state. There were only twenty-one states in the Union when Alabama was admitted. There were only thirteen states when the Union was formed. The thirteen stripes in our flag stand for the thirteen original states. Each star in the flag stands for one state. There are forty-eight of them.

George Washington died the same year that Alabama was admitted to the Union.

Mobile was the first settlement in Alabama. It was settled by two Frenchmen, Iberville and Bienville.

DeSoto was the first white man to come to Alabama. He was a Spaniard. His men were so cruel to the Indians that the Indians had to fight against them.

There were four tribes of Indians in Alabama, Creeks, Chickasaws, Choctaws, and Cherokees. Some of these Indians still live in Alabama. There is a small group of Creeks near Brewton.

Many Alabama towns and rivers have Indian names.

Alabama is an Indian name meaning "Here we rest."

The first governor of Alabama was William Wyatt Bibb.

At the present time our governor is Governor Bibb Graves, a great nephew of our first governor.

The fourth grade is going to write a history of Alabama to leave for the next grade. We are going to visit Mr. Brannon at the capitol several times. He has promised to make suggestions for our history and to help us improve it after it is written.

Helen Norris, who had begun to enjoy making rhymes in the first grade, wrote a little spring song which she sang at The Fathers' Program.

SPRING SONG

(*Tune—Watchmen, What of the Night?*)

Spring has come again!
The rose is now in bloom,
Violets and daisies their fragrance send
And birds will be calling soon.
Oho, O! Oho, O!
Spring has come again.

Spring has come again
With the bloom of the fragrant bay.
The oak and the pine and the climbing vine
All play in the breezes gay.
Oho, O! Oho, O!
Spring has come again.

Selections from the fifth grade:

A GOOD HEALTH SONG

Oh! Teacher and pupils,
We sing a health song,
If you take exercise
You'll be healthy and strong.
If you do not raise your windows
When you sleep at night,
You'll wake up in the morning
Not feeling quite right.

Oh! Little white toothbrush
We greet you today,
And if we can use you,
Our teeth won't decay.
We will brush up, so nice,
Then we will brush down,
Each day at least twice.

Oh! Bottle of milk
From the cow so kind and good,
With nice bread and butter
And all wholesome food;
Oh! vegetables green
And fresh fruits of all kind,
You must eat all those things
If good health you would find.

Then your cheeks will be rosy,
Your eyes will be clear,
And you will be happy
Each day in the year.
Your work will seem a joy,
Let us give three loud cheers
For the well girl and boy.

LADY HOLLY-HOCK

Lady Holly-Hock straight and tall,
Standing by the garden wall,
Are you never weary, say,
Waiting there for each long day?
Don't you long to run and play,
Over the garden just for fun?

Lady Holly-Hock, Oh, so sweet,
Don't you long to rest your feet
And dance upon the garden wall
Looking very big and tall?

Lady Holly-Hock tell me, I pray,
What do you do in each long day?

Lady Holly-Hock, Oh, so still,
Only the breezes to make you thrill;
With your dress so gay and bright,
Oh, you are a lovely sight!
Tell me, Lady Holly-Hock,
Don't you wish that you could talk?

Lady Holly-Hock, just one thing,
Don't you wish that you could sing?
Perhaps just to yourself you say:
"Sometime I'll run and dance and play."
But I am puzzled, as you see,
Don't you wish that you were me?

WHO CAN SHE BE?

She had eighty wigs and thousands of gowns,
She was ruler over many towns,
Sir Walter Raleigh won her favor,
By using his cape as her shoe saver.
A very fashionable lady was she,
Whom can this person be?

From the sixth grade:

EDITORIAL

The editors all want to have
A paper you'll enjoy.
We hope that we will sell it
To every girl and boy.

Perhaps your friends and parents
Would like to buy it too,
So don't forget them either
And ask them if they do.

We'll try to make it worthy
For you to buy and read,
It's just ten cents a copy
So that is all you need.

Now don't forget this either
That it's your paper, too,
So try and help to make it
Just splendid through and through.

ITALY

Italy, O Italy!
A nation great and fair,
Thy cities, how they flourish
On hills and everywhere.
Thy lofty Mt. Vesuvius,
Thy fertile plains and hills,
Thy slopes of thriving vineyards
All make thee greater still.
Thy northern Alpine mountains
They mark the border line,
And up and down thy fair land
There run the Apennines.
I see great painters painting,
I hear sweet music play,
O Italy! what art thou?
A nation great today.

A THANKSGIVING DINNER

The pumpkins once upon the vine
Were gathered one by one.
And pumpkin pies are cooking
In the oven, almost done.

The turkey once who roamed the yard,
Shall strut about no more.
I saw him roasting in the stove
When I peeped in the door.

Thanksgiving Day is here at last,
Cold winds are everywhere.
The leaves are falling from the trees,
It makes them dark and bare.

Mother's in the kitchen,
Father's cutting wood,
Sister's helping all she can,
And brother's feeling good.

Everything is ready,
I'm hollow to my feet,
Mother rings the dinner bell,
And we sit down to eat.

Then father bows his head in prayer,
To thank God for this day.
I think of this again at night,
When my own prayers I say.

There's turkey just in front of me,
Just look at him, his size!
And over there the vegetables,
And lots and lots of pies.

We eat and eat till mother thinks
For doctor she must send.
But as for us, we children wish
The meal would never end.

HELEN NORRIS WINS PRIZE

Helen Norris, age eleven, a pupil of the sixth grade, won a prize at Camp Grandview last summer. The leaders of the Y. W. C. A. held a contest in which anyone could enter. One thousand eleven girls entered, some of whom were over nineteen years of age. Out of all this number our own Helen Norris won the prize. She received a beautiful leather writing case. Our school and our grade are very proud of Helen.

This is the poem:

GRANDVIEW

O Grandview, how we love you!
Your woods, your hills, your sky,
Your swimming pool transparent,
Your Eagle's nest so high,
Your Indian Circle's bonfire,
Your golden stairway steep,
Your paths inviting footsteps
Into the forest deep.
The breezes whisper softly
Upon the big green hill.
Beyond it hides the forest
So peaceful and so still.
O Grandview, how we love you!
Your woods, your hills, your sky,
And there up in that dear old camp
The happy days go by.

Real purposes for expression call forth effort in doing the best possible work—selecting words which say what is meant, searching for beautiful ways of expressing ideas, and using form that helps others to understand what one has tried to tell.

Teachers will find these influences helpful in setting the stage for and in guiding children in creative language work:

1. The teacher's own telling of stories, her reading of lovely verse and prose give children a feeling for the use of words in telling interesting experiences.

2. Beautiful books on the reading table and illustrated poems on the bulletin board, for the children's own use, deepen this feeling.

3. The successful efforts of a few children stimulate others to try.

4. Once having written something approved by the other children and the teacher, a child is encouraged to greater effort.

5. The alertness of the teacher in pointing out opportunities when real feeling exists is perhaps the most important influence. The time for telling or writing is when the child is living an experience so richly that he has joy in relating it.

SOURCE BOOKS FOR THE TEACHER

1. Hill and others, *A Conduct Curriculum.* Scribner's.
2. Knox, Rose, *School Activities and Equipment.* Houghton.
3. Lincoln School Staff, *Curriculum Making in an Elementary School.* Ginn.
4. Moore, Annie E., *The Primary School.* Houghton.
5. Mossman, Lois C., *Teaching and Learning in the Elementary School.* Houghton.
6. Mort, Paul R., *The Individual Pupil.* American Book Co.
7. Salisbury, *An Activity Curriculum.* Wagner.

THE STATUS OF RURAL SUPERVISORS OF INSTRUCTION IN THE UNITED STATES[1]

III—Some Administrative Aspects of the Work of Rural Supervisors

CLYDE B. MOORE

Professor in the Graduate School of Education, Cornell University

AND WILLIAM E. COLE

Associate Professor in the University of Tennessee

The amount of professional service which an individual can render within a given amount of time is contingent upon so many factors that a final rule or guiding principle is impossible. This is true for surgeons, school supervisors, dentists, judges, and others. Statistical facts may be suggestive and illuminating but not conclusive. This may apply to measures of central tendencies as concerns periods of time, distances, sizes of rooms, location, and the like. It is to this end that the following facts regarding rural supervisors are submitted.

NUMBER AND TYPES OF SCHOOLS SUPERVISED

The median number of schools supervised by 400 rural supervisors in 27 states and the range of the number of schools supervised is indicated in Table I. The great variations in the number of schools supervised, both within and between states, is strikingly indicated in this table. The greatest spread between class limits is found in Pennsylvania, where the range is from 11 to 275 schools. Correspondingly wide ranges are also found in Alabama (22-108), California (14-120), Illinois (28-108), Ohio (6-110), and Wisconsin (39-135). The largest medians are found in Alabama (60), Illinois (68), North Dakota (98), Oklahoma (93), Pennsylvania (75), Texas (53), and Wisconsin (76).

NUMBER OF TEACHERS SUPERVISED

There is great variation in the number of teachers supervised by rural supervisors. If we eliminate the twenty-five who did not report, the median supervisor, of the 375 reporting, supervises from 70 to 79 teachers. Thirty-two per cent of the supervisors supervise fewer than fifty teachers; 32.6 per cent, 100 and over; and 12.5 per cent, 200 teachers or more.

The largest median numbers of teachers supervised were found in Alabama (120-139), Arkansas (140-149), Georgia (300-399), Louisiana (white—120-139), North Carolina (white—140-159), North Dakota (140-159), Pennsylvania (220-239), Oklahoma (120-139), South Carolina (120-139), Tennessee (120-139), and Texas (160-179). For all the states studied the median is 70-79 teachers.

In the light of the most acceptable criteria we have, the supervisory load of supervisors in many of the states is too heavy. Again we must not overlook the variability of certain factors. Four schools of ten teachers each may be accessible by way of paved roads, while forty one-teacher schools are far apart and the roads

[1] This is the third of a series of seven articles devoted to the subject of rural supervision. The first article appeared in the October issue.—Editor.

TABLE I

THE MEDIAN NUMBER OF SCHOOLS SUPERVISED BY RURAL SUPERVISORS IN THE VARIOUS STATES, AND RANGE OF NUMBER OF SCHOOLS SUPERVISED

	Range of Number of Schools Supervised	Median Number of Schools per Supervisor
Alabama	22–108	60
Arkansas	33–61	47
California	14–120	34
Connecticut	11–37	19
Delaware	38–37	37
Florida	8–33	15
Georgia	37–37	37
Illinois	28–108	68
Louisiana (white)	14–50	27
" (colored)	9–64	24
Maryland (white)	11–65	30
" (colored)	11–41	27
Michigan	16–52	29
Minnesota	11–73	29
Mississippi	6–33	19
New Jersey	6–38	18
North Carolina (white)	10–53	23
" (colored)	15–54	35
North Dakota	63–143	98
Ohio	6–110	24
Oklahoma	93–93	93
Oregon	49–50	49.5
Pennsylvania	11–275	76
South Carolina	11–86	38
Tennessee	28–62	50
Texas	25–90	53
Utah	4–24	20
Virginia (white)	6–40	17
" (colored)	6–44	22
West Virginia	6–70	14
Wisconsin	39–135	76
All states	4–275	30

leading to them are bad. Given the same amount of time for either group of teachers, the difference in possible supervisory service is obvious.

Rural supervisors were asked to give the number of pupils enrolled in the schools which they supervise. The schools which the median rural supervisor has under his supervision have enrolled from 1,500 to 1,999 pupils. The smallest number of pupils (230) was reported by a supervisor in Maryland, while the largest number (30,000) was reported from Pennsylvania. The median numbers of pupils in the schools supervised by rural supervisors are greatest in the case of Georgia (10,000-14,999), Arkansas (6,000-6,999), Pennsylvania (6,000-6,999), Tennessee (5,000-5,999), and Alabama (4,000-4,499).

Granting that the purpose of supervision is the improvement of instruction, the above findings are significant in that they show the very large number of pupils who may be affected by the supervisor's efforts. The larger numbers, however, raise a question as to how effective the supervisory service may be under such conditions. Furthermore, the supervisors under consideration here are general supervisors—only in three instances is the supervision within the grades special supervision, i.e., the supervision of one subject as music, art, etc. This is to be expected since the criteria used in the study operated to eliminate special supervisors.

The foregoing data show something of the breadth of work which the rural supervisor has to cover. If his supervision is to be efficient, he must possess a very wide knowledge of teaching methods, source materials, and curriculum content. This situation would not be so critical were it possible for the supervisor to use a general technique in his supervision, and for the teacher to use a general technique in his teaching. However, the existence of an efficient general technique in either

teaching or supervision is to be seriously questioned.[2]

In summary it may be said there is a very wide variation both within and among the several states with respect to the number of schools rural supervisors supervise. The range for all the states is 4 to 275 schools, while the median of the medians for all the states is 29 schools. As to the types of schools supervised, 57.8 per cent are one-teacher, 16.5 per cent are two-teacher, and 25.7 per cent are larger schools. The median rural supervisor supervises from 70-79 teachers. There is great variation in the number of teachers supervised both within and among states and also in the number of pupils supervised. The most common grade combinations are kindergarten through grade eight; grade one through grade eight; and grade one through grade seven.

No one knows exactly the supervisory load which is compatible with good supervision. However, the data suggest that there are certain existing conditions in some situations under which it would seem physically impossible for supervisors to render efficient supervision. It seems reasonable to assume that, in most cases, the rural supervisor carries too large a supervisory load for professional efficiency.

A PRACTICAL SCHOLASTIC EFFICIENCY RATING

HOWARD R. WILLIAMS
Western Reserve Academy, Hudson, Ohio

For many years the smaller public high schools and private schools have been giving intelligence tests and, having given them, find a rather limited use for the results. The private schools, in some cases, are using them as a basis for admission, and later for homogeneous groupings of various sorts. The smaller public schools find that the tests are more limited in usefulness to them because class enrollment is often too small to admit of much homogeneous grouping and admission to the school is open to all children regardless of mental ability. The larger city school systems with their larger enrollments, statisticians, and supervisors are of course enabled by virtue of more complete administrative machinery to use more fully the results of mental tests. If more uses could be found for the results of intelligence tests they would become more valuable and would then justify the expenditure of time, money, and energy on the part of the smaller schools, which they sometimes fail to do at present. Too many smaller schools are now giving the tests because they are afraid of criticism if they do not do so.

The average classroom teacher is usually neither interested nor trained in using the results of tests to the limit of their usefulness. True, most of the teaching profession know that they should expect more of their high I. Q. pupils than from the average and still less from the pupils of low I.Q., but the I.Q. ratings furnish no very tangible material for determining how much more or how much less should be ex-

[2] For a discussion of this question see: Wynne, J. P., "The Fallacy of General Techniques." *Journal of Educational Method*, 8:439-444, May, 1929.

pected from a pupil with a high or a low rating.

If a teacher had some means of quantitatively determining what results should be expected from each individual, his teaching could be much more efficiently planned and accomplished. The intelligence tests do furnish just this opportunity with a minimum of effort and statistical training on the part of the teacher. It is possible to determine from the intelligence test score what school grade each individual should make. Then, by comparing these expected grades with the actual marks received in class work, it is possible to obtain an efficiency rating for the pupil.

An efficiency grade is much more important than the actual school mark a pupil makes. For instance, if a pupil's intelligence test shows him capable of making the highest grade given but he actually makes a lower grade, he has not been working up to his normal efficiency and his case needs study and sympathetic handling, even though the mark he made may have been a passing grade. No pupil has done a really good job till he has done at least as well as he is capable of doing, that is, till he has worked at one hundred per cent efficiency. On the other hand, a pupil who has done a grade of work which just meets the school's requirements for a passing grade and whose intelligence test shows that normal expectancy for that pupil would be somewhat lower, should be encouraged and judiciously complimented, for his efficiency has been one hundred per cent or a little more.

In the light of the efficiency grade a pupil is not necessarily commended for making good grades nor censured for making poor grades. He is commended or criticized according to whether or not he has done a good job as viewed in the light of his ability.

It is a very easy thing to discourage a pupil with a low grade expectancy by taking him to task for getting grades which his teacher or parents might think too low, when he has really worked honestly and hard for those low grades. On the other hand, it is a dangerous thing to compliment a brilliant pupil for getting good grades when those grades have cost him a minimum of effort. The first pupil may quit trying, with a "what's the use" attitude, or even drop out of school altogether. The second pupil may develop a slipshod habit of work which will handicap him throughout his whole life.

These are not new ideas. Every teacher in the land knows of or has seen such things happening. Up to now, however, personal judgment has had to play too large a part in determining just what attitude should be taken toward the pupil, because it was not known exactly whether he had done a distinctly good or poor job or just had done the job that should have been normally expected of him.

This paper is an attempt to show how the results of intelligence tests may be used (1) to establish a grade expectancy for each individual, and (2) to arrive at an efficiency rating for each individual. Then some suggestions are offered as to the use of the efficiency ratings.

The Terman Group Test of Mental Ability is easily used in arriving at the individual grade expectancy. First, make a list of the pupils in each class in alphabetical order (or in any other order that best suits the teacher). Then, opposite the name of each pupil place the raw score made by that pupil in his Terman Group Test. On page nine of the manual of directions accompanying the Terman Group Test will be found a percentile distribution of raw scores by grade (see Table I). Using a normal distribution on these percentile groupings, all pupils making raw scores that would place them in the upper

TABLE I

Grade Expectancy	Grade (year)	7	8	9	10	11	12
5	1 per cent equal or exceed	147	170	181	194	203	207
	5 " " " "	122	148	164	177	189	194
4	10 " " " "	109	135	151	166	180	185
	15 " " " "	100	126	142	159	174	179
	20 " " " "	93	118	135	152	168	174
	25 " " " "	88	112	128	147	163	169
	30 " " " "	83	107	123	141	158	165
3	40 " " " "	75	97	113	131	147	156
	50 " " " "	68	89	104	122	138	147
	60 " " " "	61	81	95	113	128	138
	70 " " " "	54	73	86	103	118	128
2	75 " " " "	51	69	81	98	112	122
	80 " " " "	47	64	76	92	105	115
	85 " " " "	43	58	71	86	99	109
	90 " " " "	38	52	63	79	90	100
1	95 " " " "	31	43	53	67	77	86
	99 " " " "	20	30	35	48	55	63

five percentile or better would have a grade expectancy equal to the highest grade given by the school. This would be an *E*, *A*, 5 or 90 to 100%, depending upon the marking system employed by the school. Those making raw scores that would place them in the thirty to the ten percentiles inclusive would have a grade expectancy next lower than the highest grade, say a *G*, *B*, 4, or 80 to 89%. Those whose raw scores place them in the seventy to forty percentiles inclusive would have a grade expectancy in the third grading group, or "passing." Those in percentiles ninety to seventy-five inclusive would be expected to do a grade of work a little below passing, or what is frequently termed "conditioned." Those whose percentile rankings were below ninety could only be expected to fail. It would be well to mark off in the table on page nine in the manual of directions the various groups of percentiles corresponding to the numerical grades to be used, as indicated in Table I.

In order to simplify the finding of the grade expectancy and later the efficiency rating, it is advisable to transmute the usual literal markings used in the schools to numerical grades as shown in Table II.

Any modification of these percentage marks may be made to conform with the practices of the school.

A concrete example or two of the use of Table I will make the determination of the grade expectancy clear. Suppose a pupil in the ninth grade makes a Terman

TABLE II

5 (high)	= A = E =	90 –	100%
4 (medium)	= B = G =	80 –	89%
3 (passing)	= C = F =	70 –	79%
2 (low)	= D = P =	50 –	69%
1 (failing)	= E = D =	1 –	49%

raw score of 164. This places him in the upper five percentile among ninth graders and he should consistently make grades represented by "5" in the left-hand column in Table II. Likewise a pupil in the twelfth grade, making a raw score of 174, should make school grades corresponding to "4" in the left-hand column in Table II. This grade expectancy should then be placed in a column next to the raw score on the sheet containing the class list mentioned above. It is a help if this grade expectancy is recorded in red ink.

It is sometimes convenient to have a list of the I.Q.'s of one's students. This student efficiency sheet is a convenient place to list them, and so a column of I.Q.'s is easily added. Table III shows a sample of efficiency sheet that has been successfully in use for some time at Western Reserve Academy.

The remaining space on the efficiency sheet is next divided into as many columns as there are grading periods in the school

TABLE III

SAMPLE STUDENT EFFICIENCY SHEET

Name	Terman Raw Score	I.Q.	Expected Grade	Efficiency										
				10/6	10/20	11/3	11/17	12/1	etc.	etc.				
PHYSICS														
Bayer	174	129	5	80	40	40	60	75						
Bixby	143	102	3	130	70	67	80	100						
Brown	190	110	4	50	70	80	80	100						
Colton	165	125	4	100	80	80	80	100						
Eaton	182	135	5	80	40	60	60	75						
Farmer	191	121	5	80	80	80	80	80						
Etc.														
Etc.														
GENERAL SCIENCE														
Allen	62	93	2	100	50	50	50	100						
Cowles	98	99	3	100	80	70	67	100						
Evers	129	118	4	70	80	80	80	100						
Infield	160	126	5	70	70	60	60	80						
Kurtz	131	115	4	70	80	80	70	80						
Etc.														
Etc.														

year, or into as many columns as there are units of work in the school year, or into columns representing two weeks' periods, or in fact into columns enough to make space for the efficiency grades as many times as the teacher wishes to take inventory of the work of the pupil (see Table III).

The teacher is now ready to make out the efficiency grade. If the pupil gets a class grade represented by "4" and has a grade expectancy represented by "5," his efficiency is obviously four-fifths or eighty per cent, and 80 is placed opposite his name in the proper column. If the pupil makes a class grade that is represented by "2" while his grade expectancy is a "3," his efficiency is two-thirds or sixty-seven per cent, and 67 is placed in the proper column opposite his name on the efficiency sheet. Likewise a class grade represented by "4" with a grade expectancy of "4" would give an efficiency of one hundred per cent or normal. Efficiencies of more than one hundred are both possible and fairly common.

After a little use it will probably be noticed that there is an apparent arithmetical discrepancy in the efficiency ratings. The examples cited above show the first pupil, whose efficiency was eighty per cent, as twenty per cent below normal by his having fallen one grade point below his expectancy. In the case of the second pupil, who should have made a grade of "3" but who likewise fell one grade point below his expectancy and made a "2," the efficiency rating shows him thirty-three per cent below normal for the same amount of drop in grade. This greater drop in efficiency due to the same amount of drop in grade is, of course, due to the smaller denominator that must be used in the second case. This discrepancy is probably justified, however, in the light of the fact that the drop from "3" to "2" is much more serious than the drop from "5" to "4" and should be so considered.

There is very probably some error in this whole procedure—how much it might be hard to tell, but certainly not enough to invalidate the usefulness of the efficiency rating, as a little experience with it proves to one's satisfaction. The errors come chiefly from the personal judgment exercised in giving classroom marks and are, therefore, as reliable as these classroom marks, which are almost universally used as the criteria for promotion or failure. A teacher, by making his grading methods as objective as possible, may cut down very markedly the error in the efficiency rating. There is also most certainly some small error introduced along with the raw score from the intelligence test, but in most cases this is so small as to be fairly negligible.

The question next arises, what to do with the efficiency ratings once they are obtained. This is a big subject and must be worked out by each teacher with reference to his or her own situation. All that can be done here is to give a few general suggestions that may be of help as a beginning.

In the first place, it is probably very unwise to tell the students their efficiency ratings. A great deal of tact is necessary to keep the pupils from getting wrong impressions. Pupils compare bits of information of this sort with their fellows. If a pupil who gets a class grade of three is told that his efficiency is one hundred per cent he will sooner or later, probably sooner, get the idea that the teacher considers him "dumb." This would obviously be a mistake.

The teacher should decide at what point low efficiencies become dangerous. It might be unwise to consider anything below one hundred per cent efficiency as demanding immediate special attention.

There are many small circumstances that may temporarily slightly lower the efficiency of a pupil—for instance, a minor ailment such as a cold. Suppose the teacher decides that eighty per cent is the threshold. Then the pupils who get an efficiency lower than this mark may be sent an "invitation" to meet and consult with the teacher about the matter. An invitation worded in some such manner as the following is being used in at least one school and may serve as a helpful suggestion:

Feb. 6, 1931

J. Jones:

Your work has been below your normal output for the last grading period. You are not doing a good job until you do at least as well as you are capable of doing. If you will see me personally, I shall be glad to talk the matter over with you.

H. R. Williams, Instructor.

This invitation, when accepted, places the pupil and the teacher in an almost ideal relationship. The pupil feels that he has an interested friend in the teacher and, in spite of the written invitation, has the feeling that the conference is almost of his own seeking because the invitation is not worded so as to make the visit compulsory. Almost all of the recipients of the message come in for conference and seem quite glad to do so. If a pupil fails to heed the invitation, the teacher may then use his own judgment as to the next step to pursue. However, the cases that do come on the first request are most easily and satisfactorily handled with the greatest saving of time and energy on the part of the teacher and with the greatest good to the pupil.

The efficiency rating, then, is a valuable educational tool for the use of teacher and administrator only. It does give the teacher a rather accurate bit of information that is of great value in a follow-up of low grade work on the part of his pupils.

DO OBJECTIVE TESTS MEASURE UNDERSTANDING AND COMPREHENSION IN UNITED STATES HISTORY?

W. A. SAUCIER

John Fletcher College, University Park, Iowa

Recently there appeared an interesting report[1] of an investigation to discover the comparative success of the objective test and the essay examination in measuring judgment in United States history. As the writers stated, "Pupils in two sections of the course were given five objective tests and five essay examinations." Then correlations were worked out to discover how nearly results from the objective tests approached those from the essay examination. The conclusion as presented by the writers is: "Since the objective tests appear to measure understanding about as well as do the essay examinations and since their use conserves the time of the instructor and the class, the evidence indicates that objective tests have a legitimate place in the testing program in United States history in the seventh grade."

This conclusion seems to lack proper support. The investigation employed essay-examination questions that are of doubtful value in measuring comprehension and understanding, and the time element is made to assume a place of undue importance.

Some of the questions used in the essay examination were given in the article. They are:

1. Do you think that the Second Continental Congress performed any duties that each colony could not have performed by itself? Explain.
2. Was the War of 1812 more or less of a test for the new government than the tests of politics, neutrality, finance, law and order?
3. Who were the important leaders responsible for the successful manner in which the tests of the new government were met?
4. What made the people think that the proposed Bill of Rights would guard popular liberty against the central government?
5. Explain how President Washington obtained his first cabinet, mentioning the names of the cabinet members.

An analysis of these questions raises a doubt as to their testing understanding. In the first place, one needs to know the nature and extent of the instruction to judge how well any kind of a question measures understanding. If the pupil has been informed explicitly of a certain fact, either in the text or in the class lecture, obviously the use of that fact in answering any type of question does not necessarily give evidence of the pupil's comprehension and judgment. Rote memory may be functioning primarily. Were answers to these five questions specifically learned before the examination? This needs to be known before the success in determining the intellectual progress in history can be evaluated. In the second place, numbers two and three appear to be purely factual, involving no discussion, and one and five are solely factual in half of each question. Plainly, drill on iso-

[1] Weaver, Robert B., and Traxler, Arthur E., "Essay Examinations and Objective Tests in United States History in the Junior High School." *The School Review*, Vol. XXXIX, pp. 689-695 (November, 1931).

lated facts may prepare pupils to answer parts, if not all, of these questions. Thinking is not required.

The writers themselves state that the essay examinations were so constructed that the scoring would be "kept as objective as possible." But to the extent that subjectivity is removed and objectivity obtained, understanding and comprehension are not likely to be tested. In other words, these investigators have made the essay-examination questions so nearly like the objective-test questions that the experiment becomes valueless. To be concrete, number three in the form of a completion-test question would read: "The important leaders responsible for the successful manner in which the tests of the new government were met were ————————." In the form of a true-false question, number two would read: "The War of 1812 was less of a test for the new government than the tests of politics, neutrality, finance, law and order."

It appears, therefore, that the investigators have made the mistake of making the essay type of questions essentially objective-examination questions. Then they note that there is almost no difference between the measurement of understanding as done by one set of questions and as done by the other. What the difference might be if the essay-examination questions were less factual and more thought-provoking obviously remains unproved by scientific means.

The second questionable position of the two writers is that the time element is presented as an important factor. In the first of the article they rightly admit that they must show that the objective test measures understanding satisfactorily, else it has no place in United States history. In other words, their case rests solely on proving this one point. As they state: "These critics have insisted that objective tests are informational in character and that such tests measure only memory and recall. If this criticism is true, objective tests cannot be justified in testing United States history, for, obviously, the main objectives of instruction in this subject are understanding and comprehension rather than memory and recall." Yet in their conclusion they play up the additional factor of time, as has been quoted. Evidently there appears to be an inconsistency here.

In supporting time as an essential factor, they mention that "the use of objective tests effected a saving of 4,750 minutes for the thirty-eight pupils on the five tests." For what is this time saved? A satisfactory examination can be used as a teaching as well as a testing exercise. The authors do not realize this. They see the examination as an instrument solely for testing. Thus they conclude that the reduction of the time for examinations affords more time for teaching and learning. On the contrary, education may proceed most effectively in the examination. If the process of taking the essay examination and the preparation for it foster habits of thinking, the time is well spent. If this is true, there is no need of quibbling over the use of a reasonable amount of time for the examination. In a word, educators can afford to take time to give the right kind of an examination.

Aside from a consideration of the errors in the investigation of Weaver and Traxler, it is pertinent here to point out the educational point of view back of their position. What conception of education supports their contention concerning the objective test? Likewise, what educational philosophy lies back of the discussion examination?

Thorndike's popular psychology of learning supports the testing program of Weaver and Traxler. Essentially it is the view that all learning is specific, consist-

ing of making connections between particular neurones. It is the formation of innumerable particular habits and the development of countless independent skills. Learning, too, is considered as analytical and, therefore, pupils are supposed to learn by parts instead of by wholes. Believers in this type of learning seem to assume that in some mysterious way, perhaps by chance, the numerous isolated facts and skills will become related and will function effectively as the person is called on to act intelligently. In following this point of view, teaching tends to become a mechanical process with emphasis on drill, rote memory, and animal training. Consistency demands a means of testing in line with this conception of education. Obviously the examination, regardless of its form, should consist of numerous specific "samplings" of details. The objective test meets this requirement very satisfactorily and is therefore recommended.

Contrary to the view of education as specific, modern biology and psychology affirm that the whole person is involved in learning. Accordingly it is claimed that the child learns by wholes. One thing is not learned alone. Learning is seen as creating, organizing, seeing relationships, building concepts, developing ideals, comprehending, judging, thinking. This conception of education argues for a teaching procedure that stresses solving problems, construction, self-expression, appreciation, originality, and the like. Adherence to this theory of education makes a corresponding means of measurement imperative. Consistency requires a testing program, in United States history or in any other subject, that involves actual expression of comprehension and judgment in the process of solving problems, constructing, and creating. To make this possible, some form of the discussion examination is necessary.

The important point is recognition that any accomplishment or activity is best measured through *actual participation in it.* Manual training, for example, could be made simply particular exercises in boring, sawing, planing, measuring, etc. The logical method of checking progress in these independent skills would be the selection of several "samplings" from them. But manual training should be ability to comprehend, to judge, to construct, and to create. It is clear that ability in the automatic habits of sawing, boring, and planing is much different from progress in making tables, ironing boards, hall trees, toys—that is, development in comprehending, judging, constructing, and creating. In testing this type of manual training, instead of checking on a large sampling of automatic habits, the boy should be allowed to make or build.

The same is true in United States history. If theory and practice encourage specific learning in this subject, if numerous isolated details are the end in view, the test chosen should afford an opportunity to show proficiency in dealing with such details. It is recognized that the distinctive function of the new type examinations is to afford an opportunity to the pupil in the employment of independent facts and skills. Therefore, the objective test would be the logical one for the teacher to choose. But, if learning history is considered as creating, organizing, comprehending, judging, the examination selected must provide a *real opportunity to participate in the actual process of performing these very same mental operations. For this type of learning the employment of the discussion or essay examination is essential.*

It can be seen that one's philosophy of education determines the examination chosen rather than "scientific" investigations. The objective test exists for one

conception of education; the discussion examination exists for a very different conception. *As the two views of education are much unlike, so the corresponding ways of measuring must be unlike.* An appreciation of this fact should have prevented Weaver and Traxler from attempting by an experiment to show that the objective test and the discussion examination could be used interchangeably in measuring comprehension and judgment in United States history. And careful consideration of the problem would have prevented the smuggling in of objectivity, as measured by details, in the comprehensive examinations used.

MANNERS MAKETH THE MAN

DANIEL P. EGINTON

Assistant Supervisor in Research and Surveys,
Connecticut State Board of Education, Hartford, Connecticut

Shortly after the famous English public school, Winchester, was founded in the fourteenth century, William of Wykeham suggested that, in order to impress the importance of personal refinement or culture upon the youths, the slogan "Manners maketh the man" be hung upon the walls of the institution. Although the modern educator would probably agree that it takes more than manners to make a man, no one can be a man or woman in the finest sense of the word unless he or she is courteous and well groomed. Probably no single ideal should influence human conduct more directly than that of always acting as a real gentleman or a real lady. Unconsciously, we associate culture with both a lady and a gentleman. On the screen we see the highly polished, suave, genteel Brooks and we are satisfied that, even though he is acting, he must be a real gentleman in private life, so well has he integrated these admirable qualities into his personality. We see the slobbering, rough and ready Beery and we wonder if the casting director does not do considerable research into the private lives of his actors before he assigns one to a so-called he-man's role on the screen. Likewise, the Russian nobleman has come to represent one of the ultra types of personal refinement, which often is carried to such extremes that we are tempted to look upon it with disgust.

Critics of American institutions and culture seldom, if ever, consider personal charm and good manners as characteristics of the typical American because, due to emphasis upon acquiring money and property, this ideal is crowded into the background. Probably the nearest approach to stressing fastidiousness is the curriculum of the girls' finishing schools, which unfortunately too often stress snobbery at the expense of democracy.

There is no doubt that, in general, the schools have sadly failed in their attempt to help pupils gain an appreciation of the importance of securing æsthetic refinement and to improve their manner of speaking, dressing, eating, and acting. Too often pupils graduate from our high schools with high A's in subjects and low F's in manners. In a personal interview the high scholastic record looks somewhat tainted when viewed in the perspective of dirty

fingernails, impulsive speech, and body odor! Most employers desire more than a human machine around them; they desire to associate with refined human personalities who have a deep appreciation of the beautiful.

There are several reasons why the public schools have not succeeded in turning out a "graduate" well-mannered, genteel, and appreciative. Although it is considered desirable in practically all schools for teachers to take up personal problems of conduct with the pupils in the lower grades, in the majority of high schools it has long been considered "taboo" to take up these problems directly with older children. Teachers in higher grades seem to be satisfied with the argument that pupils should have acquired the fundamentals of good manners in the lower grades and at home. Therefore, little if anything is ever done to help the high school boy who talks rudely, yells "shut up" at his friends, tramples over the feet of others without ever begging their pardon, puts his crackers in the soup which he gulps down (not sips), and occupies the center of the stage when he should be in the background. Most teachers are so busy teaching subjects that they fail to notice the personal habits of children; and even those who do try to note them are handicapped because they seldom are in a position to observe the *real* habits of children when they eat, play, are at dances, at home, etc. The traditional curriculum simply does not create the type of situations needed to draw out the real reaction of the whole pupil! It must be greatly broadened before there is much hope of teachers learning all about their pupils, although they can learn much from direct study even under the most narrow kind of curriculum. Furthermore, they can assume much more in doubtful cases.

Schools which are stressing the importance of counseling and guidance seem to have thought *through* the importance of "coming to grips" with the real personal-culture problems of pupils more than the schools which still think it quite unbecoming to tell John that he is very rude and crude at times, that he fails to observe the rights of other people, or that he should try to wear clean socks and shirts. Frankly, if the school staff does not try to help John to master his personal-habit deficiencies, who will? It cannot be soundly argued that he should know better or that his parents should help him, for obviously the fact that he is what he is shows that he needs more help. It is the function of the school to provide that help exactly as in the case of a subject matter deficiency. Schools simply must give more time and energy toward guaranteeing that the pupils will develop more personal culture and refinement than they are doing at present.

No doubt many pupils in school develop considerable personal refinement both unconsciously and consciously from their informal contacts with the staff, as "nothing sinks into the mind of youth more deeply than a personal example." Unfortunately, however, the fact that so many of our graduates are ill-mannered is conclusive evidence that this influence is not sufficient to insure the proper growth of many pupils. It is not altogether amiss to suspect that in some cases this influence-by-example actually harms many pupils who try to imitate their instructors. Too often it is true that, if a survey were made, it would be found that there is great need for some teachers, principals, and superintendents to enroll in these personal-culture courses before they can possibly help pupils, even though they may want to help them. They simply do not know!

Many staff members have struggled vainly to overcome the cultural deficiencies

of an early environment; others, like the high school pupils, have never even been conscious of their unpolished manners, since it is below the status of a normal school instructor to try to help a student to be a little more of a gentleman or a lady. I even suspect that some of our highly heralded educational leaders could profit considerably from the experience in a personal-culture course, although there is no hope that they will ever question their own conduct enough to discover the real facts.

It is quite impossible to expect professional schools to overcome completely the cultural deficiencies of students who have been raised in the slums and are ambitious to become teachers. However, unless better methods of selection are organized, professional schools must stress the importance of having their students pass examinations in manners as well as in methods.

In order to develop the "whole teacher" as well as the "whole pupil," we must look beyond the growth of academic intelligence or we are just "kidding" ourselves about our capacity as educators; we must insure understanding and the development of habits of correct, polite manners of appearance and conduct becoming only the highest type of lady and gentleman. We must create the situations needed to discover and to test the knowledge and habits which our students possess before we can possibly know which aspects of information and conduct should be stressed. We must provide abundant opportunities to practice overcoming these deficiencies when discovered. Although some problems may well be discussed in classes as a whole, the program must be an individual one in which each pupil's deficiencies are taken up in detail according to his interests, needs, and abilities.

A word of caution should be written here: developing manners must not be narrowly interpreted as meaning merely that phase of human behavior which pertains to courteous conduct and as such can be taken up as a separate course in the curriculum. Manners are far too closely linked up with intelligence and a general understanding of the nature of human relationships, especially of responsibility and privileges, to be adequately developed as a separate subject. All of the activities, but especially the social studies and the creative arts, should further the development of refinement. All activities should be rich in abundant opportunities for practicing self-control and courtesy as the pupils suffer to the degree that these are neglected.

Neither is it sufficient to maintain that the cultural needs of boys and girls are being met adequately when they have an opportunity to attend weekly lectures on questions of genteel conduct; there must be a "follow through" to determine to what degree these lectures have "taken" and to discover those students who are so calloused that they can be interested only through a series of personal conferences which sometimes become quite embarrassing. However, a tactful person can accomplish much, although the only way some pupils can be convinced is through the shock method, by which their actual deficiencies are bluntly pointed out to them and remedial measures suggested.

Steps should be taken to see that pupils who are just "green" and need social contacts should participate widely in the challenging social activities in order that they may acquire some polish and cultivation. It must always be remembered that the pupil is the one who must build up his dearth of culture! It cannot be imposed upon him by the teacher, who can only try to point out his needs, interest him in meeting the situation, and help him to execute the program which is necessary.

The art activities should help every stu-

dent to gain a better appreciation of beauty and to integrate this quality into his own personality and environment. In fact, to see that he does so should be one of the major requirements of work in art. Many of the requirements of passing work in the social studies, likewise, should be to check up on the conduct of the pupil in his social environment, especially in the school, but also to as great an extent as possible in his home, church, and other places where he comes in personal contact with people. Such an approach should help each pupil to become increasingly more conscious of the real meaning of learning as doing, and not as a process of absorption and filing away as in a museum.

Since every teacher should be a teacher of the "whole child" (not just his head), all have some responsibility to help students overcome cultural deficiencies. This is especially true in those schools which do not have a dean to discharge those functions. The teacher should take advantage of each situation as it arises and look for leads which may be developed more fully in later conferences.

The problems of many pupils can be reached in part at least through the home-room program in high schools, where the teacher may stimulate and guide general discussion so as to stress the points which she thinks most important. The English teacher also can accomplish much by interesting pupils in making an analysis of cultural problems which they face and having them outline a method of procedure to overcome them. The whole school staff should study in detail in order to determine the best ways and means by which pupils may have the kind of experiences necessary to attain that high degree of personal charm and refinement which we all admire but which we seldom attain.

SUPERVISION AND CREATIVE TEACHING IN SEATTLE

HELEN M. REYNOLDS AND DOROTHEA JACKSON[1]
Seattle, Washington

We must, for our own help, define in some way the meaning of "Creative Activity." How can we help other teachers or children to release in themselves this phase of living unless in some degree we sense the meaning of the term? Perhaps no one has done more for us in this situation than has Hughes Mearns, and this quotation from his writings is given as an interpretation of the meaning of this much-used, much-misunderstood favorite in the terminology of the educational literature of today.

The creative spirit is something more than a product in print, clay, canvas; it is dancing, rhythmic living, a laugh, a flash of the mind, strength of control, swiftness of action, an unwritten poem, a song without words; it is life adding its invisible living cells to more and abundant life. But these products, picture, poem, clay, figure, which we show in our public exhibits, will serve; however inadequate they are for us, for our eager interest is rarely on the product, we use them to tempt the unbeliever to loiter a moment at the shrine of the true gods. Our argument may not move him,

[1] Miss Reynolds is Director of Kindergarten-Primary Education and Miss Jackson the teacher who coöperated in assembling these case studies.—Editor.

but the grade of our service may win him into the faith.

The creative impulse is more easily observed in young children, but the housewife who bakes unerringly without book or recipe knows it; the carpenter fashioning a cupboard to his own notion of shape and line, the office man given free sway in the phrasing of a sales advertisement, the lawyer playing upon the mood of judge and jury, these practice it without knowing it; my true love's letter is the perfect product of instinctive artistry; all our adult ways of interacting one with another, in short, call on the creative spirit, and our life is artistic or dull in proportion to our creative gifts.

Outwardly it is harmony; a unity of eye, hand, bodily muscles, mind; a concentration upon the object of desire that sets the world aside. It is frequently balked by the need of special information or of special skill; these are the obstructions that it must surely overcome or the heart's desire is not achieved and the spirit dies; these, too, are the strategic places where the wise teacher is at hand with just the right assistance.[2]

With some comprehension of the meaning of the term, what possibility is there for any of us as leaders of teachers or leaders of children having any share in the release of this power in others? Yeomans offers this as a possibility in the case of children—"all the school has to do is to provide materials, a sympathetic coöperation and an exhibition of standards of excellency."[3] Is there much more we can do when, as supervisors, we attempt to aid in the release of creative activity in the teacher?

CASE STUDIES

These case studies describe the efforts of a cadet supervisor to aid a group of young teachers in the attempt to attack, in a creative way, the problems of teaching.

As a part of the supervisory plan, the Seattle Public Schools offer professional courses each year which are designed to meet the needs of the teachers. One course, called "Units of Work for the Kindergarten and Primary Grades," supplied a mimeographed bulletin for "The Work Period." Among the items listed under "The Teacher's Part" was found the following:

"She arranges materials and tools in an orderly manner with *work centers* carefully defined and materials well labeled—thus avoiding confusion."

A certain teacher in the class was then considering the arrangements of her room. "Work centers" had not yet occurred to her; it was just the suggestion she needed to help crystallize the plans which she had been working on for some time. It enabled her to begin immediately the reorganization of her room.

She began the activity by enlisting the coöperation of the children. The kinds of work done in the classroom were discussed and the desirable location for them was considered. The following examples will indicate the nature of the centers chosen:

Carpenter shop
Library
Pet Corner
Colorful frieze for the front of the room
Space for records of achievement
Group—Work corner
Space for good work headed with a quotation chosen by the children
Board space for a seasonal bit of poetry
"News of the World" bulletin board
"Our Own Art" bulletin board
"Our Home Work" bulletin board
History bulletin board
The teacher's bulletin board where the children found interesting news each morning about things they were going to do

Because the teacher wished the children to share in the care of the room, she aimed to establish standards in

[2] Hughes Mearns, *Creative Power*. Doubleday, Doran and Company.
[3] Edward W. Yeomans, "Salvaging the Family." *Progressive Education*, October-November-December, 1926.

Furniture arrangement
Flower arrangement
Bulletin board arrangement
Color combinations
Mounting of pictures
Care of plants
Care of pets
Housekeeping

From a modest beginning a well-organized service committee took over the above responsibilities.

The supervisor was helpful in this unit of work because of her sustained interest. Whenever she was in the building she would "drop in" to see the latest developments. After the plan seemed to be completed, she was able to suggest "a beauty spot" for the front of the room to take the place of the supply table which had been given a prominent place. What an idea for further creative activity!

The teacher's record of this development of classroom organization was used later by the supervisor with a university class studying room organization and arrangement.

Occasionally supervisors go visiting to distant or neighboring lands. Telling what they have seen other teachers doing is often interesting and helpful to the home teachers.

One supervisor told how she had seen large maps made by children through the use of lantern slides. The map was projected on a large sheet of paper and the children traced the outlines. This device made it possible for classrooms to have an unlimited supply of maps. The idea was used by a teacher who wished to have her group in history make a map to show various routes followed by early explorers. The children were so fascinated with the drawing of the map that they wished to beautify it with color. A harmonious color scheme was evolved to help them accomplish their end. The supervisor, arriving during the process, suggested to them the idea of bordering all of the land formations with blue and green for emphasis and unity. The teacher later gave the children an opportunity to design a border composed of significant historical sketches.

Naturally the map was a precious possession when it was finished. The research necessary to fix the routes and adorn the edges with pictures had done more to establish a historical feeling than any amount of purposeless reading could have accomplished.

One supervisor believed that the enjoyment of poetry was being, to some extent, neglected in the classrooms. A meeting was held in which the work of several groups in this field was described. One teacher was so impressed after attending one of these meetings that she decided that her children were going to have some poetry every day and she was going to make it her business to have them like it. She procured all of the available books suitable for her junior primary and first grade children. Then she tried to select poems which she thought would appeal to the interests of her group. Because she made wise selections and also because the children had had some background for poetry in kindergarten, it was a joyous task to introduce them to it. Soon they were demanding poetry and enjoyed it more than stories.

At the end of the year, when their playhouse was all finished and a program was being prepared for the mothers, this group of children composed the following rhyme to fit the activities of their playhouse.

OUR PLAYHOUSE

What shall we do when we all play house,
All play house, all play house?
What shall we do when we all play house
In our own play house?

We will cook a good breakfast
Good breakfast, good breakfast
We will cook a good breakfast
On our kitchen stove.

[Other verses followed. The tune used was "The Holiday," from *Progressive Music Series*, Book I.]

While singing, they were grouped in the different rooms of the house; some in the kitchen, some in the living-room, and some in the bedroom.

In this case the supervisor's part was the constant emphasis on poetry at almost every gathering. Besides this she supplied bibliographies and in some cases the poems which might fit particular activities.

Bibliographies often present just the article needed. The reference to an article by Hannah Falk, "Research Work in the Museum for Ten-Year Olds," in *Progressive Education* for July-August-September, 1928, helped one teacher with a history unit.

History, as such, begins in the third grade with the story of Seattle. The teacher wished to have an orderly historical background for this study. She realized that the children had a very garbled idea of past events. Thanksgiving Day happened once upon a time. Columbus discovered America in October and Washington was born in February long, long ago. The teacher feared that the beginning of Seattle, too, would be relegated to this same "long, long ago." How could she avoid it? At that time Miss Falk's article was read and from it a historical chart was launched which helped the children to place every event, past and present, where it belonged.

To start it, the teacher let the children tell everything they knew about history. After their supply was completely exhausted she permitted them, at the rate of five items per day, to dictate historical events and she wrote them on the blackboard. Volunteers then offered to look up the dates to accompany the events. In the meantime, the teacher had prepared a large chart made of two widths of brown wrapping paper, blocked off in time areas from 1400 to 1930. As soon as a date was found for a particular item it was then struck from the blackboard, typed on a slip of paper by the teacher, read orally to the class, and mounted on the chart in its rightful place by some child. The teacher and pupils searched for pictures to make the chart more valuable. Pupils were encouraged to bring current clippings from newspapers and magazines. The children's birthdays were typed and placed in the section for their year of birth. As the chart became well filled, the teacher conceived the idea of placing gold stars beside the Seattle items. This made them shine forth with twinkling gaiety and delighted the children.

The chart satisfied a need which had baffled the teacher. It was an inspiration to continue throughout the semester's work in history.

Acquainting teachers with accepted standards for certain activities often gives them a basis for creative effort. Many teachers believe that when they are called upon to have their children present a program they must begin the search for something for them to do. Trips to the library usually bring forth plays with parts all written out, costumes designed, and stage settings arranged. Or, perhaps, pieces to be memorized and recited, more or less related to the particular holiday, are found. If teachers understood the principles of an ideal program, this searching for ready-made material would not continue.

The following standards presented to Seattle teachers made it possible for a certain teacher to help her children create a program:

Principles Underlying the Planning of Programs

Any program, festival, or school entertainment of any sort in which children participate should be considered primarily from the standpoint of its educative value to the children.

All programs should be an exemplification of the viewpoint and standards of the Seattle Public Schools. . . . The general theme should be chosen from the rich material of the content subjects included in our general educational program. In the majority of cases, no better material can be found than that given in our courses of study for regular work. Adherence to these suggestions will avoid the introduction of undesirable music, dances undesirable in type or costume, and trivial themes unworthy of the time spent upon them.

The preparation should be made as far as possible in the regular class periods. This can be done if planned well in advance of presentation, if the quality of material meets a high standard so that it may rightfully be substituted for the work usually scheduled, and if the program is not too elaborate really to belong to the children.

Costumes, under most circumstances, should be simple enough so that the children may assist in their making in the fine and industrial art classes and in the sewing periods. . . . Costumes and properties should be considered only in the light of helps to the realization of the children's natural desire to give pleasure to others with the presentation of their favorite stories, songs, and dances. All display should be carefully avoided for the sake of the children.

The Parent-Teacher Association in one building had decided to have a tea in each classroom so that the mothers of the particular group might become acquainted. To interest the mothers in coming, the teacher had been asked to have a program given by the children.

After reading the above standards the teacher decided to base the program upon classroom activity. She talked to the children about the opportunity which was before them and asked them for suggestions as to what they thought their mothers would enjoy. They decided to give a dramatization which they worked out from the story of Hansel and Gretel. The boys thought their mothers would enjoy seeing them do some of their exercises to music. One child wished to say a poem which she liked. As the tea was to be given the day before Valentine's Day, each mother should receive a valentine made by her child. The valentine idea led to the possibility of decorating the room for the party. Then, because their mothers were coming, they felt that they should do something to express their appreciation for all the kind things their mothers did for them, so they wrote delightful bits of poetry and prose to say to them on this joyous occasion. The whole proceeding seemed to be permeated with the thought of giving. The more the children gave of themselves, the faster the ideas came for additional entertainment.

The supervisor was mostly a listener for this occasion. She made some suggestions for room decorations and supplied a few articles for the adornment of the tea table because the teacher, being away from home, was unable to secure them.

Pictures of activities are more helpful to some teachers than bibliographies. To see what someone else has done gives a feeling of assurance which sometimes is all that is needed to insure the first step in accomplishing a creative piece of work.

A teacher of the second grade was just finishing the study of Puget Sound Indian life. She wished to have her children dramatize a real Indian legend for a primary assembly. Seeing pictures of a similar activity served to help her in the planning of her dramatization. It is true the costumes the children made were not like the ones in the pictures, the scenes were not arranged in the same way, and the dramatic effects were not similar; yet, seeing the pictures provided the necessary stimulation when the play was being born in the mind of the teacher.

The play was genuinely a creative enterprise. After the children had heard the story several times, they discussed using it

for a play. The first task before them was to decide upon the scenes to be presented. The characters had to be listed. Then there were "try-outs" to decide who could express the story most effectively so that the audience would understand it. As soon as this part of the work was on its way, the need for costumes, scenery, and properties arose. As all members of the group were to take part in the play, they all must have a responsibility in supplying the paraphernalia.

There were places in the play where dances would help the story. Music had to be found for them. Then, too, songs were needed, so words had to be composed to fit the thought of the play.

At last all was in readiness and the time for the performance had arrived. From the beginning to the end the natural, childlike atmosphere was evidence that the dramatization had been a fine creative activity for teacher and pupils.

The lovely spirit seemed to carry it through to success.

The supervisor entered in occasionally to establish standards of workmanship in costumes and scenery. She had assisted in supplying the music. She had planned to be available whenever needed. As a result, after the curtain had been dropped at the completion of the last scene, the young teacher had gained from the experience such a sense of freedom from lurking fears of her own abilities that she was mentally set to give another play at any time.

From the cases described, one may conclude that we may expect measurable evidence of values in such stimuli as: bibliographies, bulletins, pictures and accounts of activities, standards, professional courses and meetings, lectures and planned visits. One must not, however, lose sight of the intangibles of supervision which have so much to do with forming the attitudes which make possible creative activity. Although personal conferences take time, the supervisor who is hurried misses a priceless opportunity to stimulate creative thinking. It is good for teachers to talk out their plans to one who has a perspective on classroom procedures. Questions from the supervisor at this time often provoke thinking that initiates new types of work. The standards of workmanship a supervisor maintains necessarily influence the teacher to increased effort in accomplishing activities undertaken. Continued interest in a project after it is launched helps to prevent inhibitions which wilfully present themselves to the young teacher at frequent intervals. Perhaps the greatest inspiration of all comes from the supervisor's faith in a creative program.

"Releasing Creative Activity in Teachers" is like playing a great organ. The supervisor must be master of her various techniques and have such an understanding of the nature of children and teachers that her touch brings forth the creative living that is possible only when teachers and supervisors are in accord.

THE INDETERMINATE STATEMENT

C. C. WEIDEMANN

Director, Bureau of Educational Reference and Research, Teachers College, University of Nebraska, Lincoln, Nebraska

In 1920 McCall[1] presented the true-false examination. In 1926 the writer[2] described methods of construction and limitations of the true-false statement. During that investigation, the *indeterminate* statement was defined as distinct from the true-false statement. This was followed by a short exposition of the *indeterminate* statement.[3]

An *indeterminate* statement is *doubtful as to whether true or false* when judged so by a criterion[4] of acceptability. Such a criterion is established by "pooling" the opinions of instructors or individuals assumed competent in the particular subject in question. It was arbitrarily decided to use the opinions of a group of not less than twenty instructors for this study. The study was made in the history of education. At least three classes of *indeterminate* statements may be arbitrarily defined, exclusive of statements either *true* or *false*:

1. A statement may be considered as *true* when 95 or a greater per cent of the judges mark the statement as *true*.
2. A statement may be considered as *false* when 95 or a greater per cent of the judges mark the statement as *false*.
3. (a) A statement may be considered as *doubtful as to whether true or false* when the sum of the total of the judgments of *true*—(A), and one-half of the total of the judgments of *doubtful as to whether true or false*—(B), divided by the total of all judgments times 100 is either less than 60 per cent or more than 40 per cent.

   (b) A statement may be considered as *doubtful as to whether true or false* when the sum of the total of the judgments of *false*—(C), and one-half of the total of the judgments of *doubtful as to whether true or false*—(B), divided by the total of all judgments times 100 is either less than 60 per cent or more than 40 per cent.

   For example,

   Let A equal 16, B equal 4½, C equal 17; total judgments equal 42.

   Then, 16 plus 4½ divided by 42 times 100 equals 49 per cent and 17 plus 4½ divided by 42 times 100 equals 51 per cent.

   In each case the per cents are greater than 40 and less than 60. The item is therefore *doubtful as to whether true or false.*
4. A statement may be considered as *more likely to be true* than *doubtful as to whether true or false*, when the statement is neither *true* by Criterion 1 nor *doubtful as to whether true or false* by Criterion 3.
5. A statement may be considered as *more likely to be false* than *doubtful as to whether true or false* when the statement is neither *false* by Criterion 2 nor *doubtful as to whether true or false* by Criterion 3.

[1] McCall, William A., "A New Kind of School Examination." *Journal of Educational Research*, 1:33-46, January, 1920.

[2] Weidemann, C. C., *How to Construct the True-False Examination.* Bureau of Publications, Teachers College, Columbia University, New York, 1926.

[3] Weidemann, C. C., "Determinate and Indeterminate Information in Written Examinations." *Journal of Educational Method*, 7:126-127, December, 1927.

[4] According to Webster's *New International Dictionary*, p. 534, "a *criterion* is a standard of judging; a rule or test, by which facts, principles, opinions and conduct are tried in forming a correct judgment respecting them."

The major difficulty encountered in the construction of the *indeterminate* examination is that of getting a sufficient number of competent judgments of each test item in order to place the item in its proper *indeterminate* class.

Class 1—Statements with a tendency to be *true*, yet not *true*.

1. Athenian education was well adapted to the times and made good citizens.
   The per cent of the judges marking this item *true* was 83.
2. The Socratic method as used by the Greeks was very effective.
   The per cent of the judges marking this item *true* was 71.

Class 2—Statements with a tendency to be *false*, yet not *false*.

1. The development of the kindergarten has been more marked in Germany than in any other country.
   The per cent of the judges marking this item *false* was 76.
2. As Rousseau states, "education should be negative."
   The per cent of the judges marking this item *false* was 83.

Class 3—Statements which are *doubtful as to whether true or false*.

1. The Sophists introduced intellectual education.
   The per cent of the judges marking this item *false* was 55.
2. The burgher schools were responsible for the development of civic control of education.
   The per cent of the judges marking this item *true* was 52.

The foregoing examples were determined by "pooling" the judgments of the twenty-one instructors assumed competent in the history of education.

It is possible to put *true-false* and *indeterminate* statements in the same examination. Use about an equal number of Class 1 and Class 2 of the *indeterminate* statements. Use any number of Class 3. Use about an equal number of *true* and *false* statements.

A recommended set of directions follow.

1. If a statement is *true*, put a figure one (1) upon the space to the left[5] of the statement.
2. If a statement is *false*, put a figure five (5) upon the space to the left of the statement.
3. If a statement is *doubtful* as to whether true or false, put a figure three (3) upon the space to the left of the statement.
4. If a statement is *more likely to be true than doubtful*, yet not entirely true, put a figure two (2) upon the space to the left of the statement.
5. If a statement is *more likely to be false than doubtful*, yet not entirely false, put a figure four (4) upon the space to the left of the statement.

The recommended method for scoring is, *Score equals the number right*. As yet neither the most valid nor most reliable scoring method is known. It is probable that a weighted method may be preferable to maintain a high degree of consistency between the scores on individual test items.

The *indeterminate* examination seems to test the ability of the student to judge the status of any given item on a five-point decision scale. Unlike the *true-false* statement, it utilizes subject matter about which inquiry and discussion arise in the mind of the student. It seems that it should test general reasoning ability to a greater degree and leave to the *true-false* statement the task of testing recognition of fact and the simpler forms of reasoning. The *indeterminate* statement includes statements of issues and controversial problems. For example, "There should be more men teachers teaching in high school than women teachers" is controversial and probably a Class 3 *indeterminate* statement.

[5] Use "right," if preferred.

THE CLEARING HOUSE

A BRIEF OUTLINE OF THE UNIT PLAN OF TEACHING[1]

The central idea of the unit method of teaching was developed by Henry C. Morrison, Professor of Education in the University of Chicago. The plan is primarily concerned with the improvement of instruction, the mastery idea, and the development of techniques applicable to each subject in the curriculum. The unit is defined as "a comprehensive and significant aspect of the environment, of an organized science, of an art, or of conduct, which being learned results in an adaptation in personality." There are units in the fields of knowledge, of appreciation, and of motor control. The technique in general is: *pre-test, teach, test, adapt procedure, teach and test again to the point of mastery.* By the mastery notion is meant that "the individual either has the unit learning or he has it not." Professor Morrison believes that mastery in the science type of learning will take place when the units are well organized and the following method employed:

I. Exploration or Pre-test

Meaning: to explore the intellectual or ideational background for the unit as a whole. To explore the pupils' grasp of understanding which the unit implies and *not* memory details.

Purposes:

1. Economy
2. Establishment of apperceptive sequence
3. Orientation

How conducted:

1. Introduction: Teacher says (for example): "We are going to study for some days about ..... It will be interesting to learn how much you know about it already. Perhaps some of you understand ..... so well already that you will not need to study at all in this course. Perhaps others of you know almost nothing about it. Well, that won't matter; we should like to see what you all know. So do your best." (Morrison, p. 238.)
2. Test (either one, but preferably both):
   a. Written (avoid being too formal)
   b. Oral quiz and class discussion
3. Evaluation of the test: The central question is: What is the test disclosing touching upon the pupils' intellectual content and background? *Not:* How does one pupil compare with another pupil? *Nor:* What is his or her score?

Time: Usually brought to a close the first day. Give no assignment.

II. Presentation or Pre-view

Meaning: A straight expository explanation of a definite body of related concepts—like giving pupils a prolonged aëroplane view of a city which they are required to investigate thoroughly.

How conducted:

1. Imparting major essentials, i.e., a *sketch* of the unit but not a

[1] For a complete discussion the reader is referred to: Morrison, Henry C., *The Practice of Teaching in the Secondary School.* University of Chicago Press, 1928, pp. 220-316.

finished picture. Detail should be reduced to a minimum. Aim to impart the understanding of the unit itself.

2. Test: written or oral.
3. Evaluation of the test:
   Ascertain whether or not the pre-view has registered. "Have the pupils caught the notion?" It is *not* to grade the pupil. If pupils have not caught the notion then
4. Re-presentation is necessary.

Time: Never more than twenty minutes and less if possible. In lower grades less time is desirable.

III. Assimilation

Meaning: Pupils make the new understanding their own. It is the process of intellectual growth. Individual or group supervised study.

How conducted:

1. Classroom is organized as a study-room. Teacher passes quietly and as rapidly as possible about the room from pupil to pupil, giving such help as is necessary. When several pupils have the same difficulty, explain fully to the entire class.
2. Study tools:[2]
   a. Reading
   b. Writing
   c. Mathematical concepts and processes
   d. Graphic representation or drawing
   e. English writing (good papers required)
3. Materials of study: The Guide Sheet. The Guide Sheet should include some such student activity as:
   a. Solving problems
   b. Interpretation of new situations
   c. Compositions
   d. Drawing or sketching
   e. Reading (extensive, intensive)
   f. Summaries
   g. Reports
   h. Experimentation
   i. Demonstration before the class
   j. Observation of demonstration
   k. Note-book work
   l. Field trips
   m. Discussion before the class
   n. Playlets, pantomime
   o. Debating
4. Test: Look for *mastery*. Plot scores for diagnostic study. Those showing mastery should be allowed to proceed to voluntary projects. The others undertake study of *more* assimilative material (*more, not the same material*).

Time: The time depends upon the nature of the unit. Ordinary cases require about five to ten periods, and much longer if really effective work is to be accomplished.

IV. Organization

Meaning: This constitutes the building up of the framework of the unit. It is focused upon the central understanding of the unit, and not upon the assimilative material.

How conducted: Class comes together. Pupils gather the unit in outline form with the essentially supporting facts (without books, notes, etc.).

Test: The activity itself is the test.

[2] These tools of study are necessary for the pupils to make satisfactory progress. Pupils labor under a handicap if they cannot make use of these tools of learning.

Time: Not more than two class periods, and often less than one period.

V. The Recitation

Meaning: "The class is now brought into a social group for the purpose of giving expression to the individual understandings of the pupils."

How conducted: Either oral or written—preferably both. Professor Morrison says: "The ideal form of recitation is a series of oral presentations in which each pupil attacks the unit as did the teacher in his presentation to the class, taking the front of the room for that purpose. In the ordinary class group of thirty or more, this procedure would require too much time. Accordingly, on each unit only as many pupils are selected for oral recitation as experience shows can conveniently be managed. The remainder of the class make written recitations. The selection of pupils for oral recitations is changed from unit to unit so that the entire class in rotation has opportunity in this form of recitation several times during the course."

Time: About one or two class periods. "The number of class periods which can be devoted to this aspect will depend upon the teacher's tact in sensing the point at which the class is becoming stale. Two days in the physical and social sciences is a fair allowance; less in grammar and mathematics, and of course less in the elementary school than in the high school and junior college." (Morrison, *op. cit.*, page 231.)

BYRNE J. HORTON,
De Paul University,
Chicago, Ill.

THE GOOD HEALTH HOUSE

The morning health talks, posters, and plays all help to make good health principles a part of the child's daily life, but nothing accomplishes such results as a worthwhile health project.

Recently a group of thirty-three first grade children carried out such a project. It all came about by the presentation of a large carton to the class. A little boy found the box and thought it would make a fine house. This suggestion was readily accepted and as we were particularly stressing the good health rules at this time, it was decided to call it the Good Health House. This instantly suggested many things that we might do to make it a real Health House. The house was covered with white paper and thirty-three windows —one for each child—were cut; the little blinds were covered with green construction paper; a front and back door, a nice green roof railing and chimney were made, and the house was complete! In order to make it distinctively a Health House, the children cut pictures representing the good health rules. These were pasted on all sides of the house. It certainly was a cheery little residence with its bright-colored fruit, vegetables, toothbrushes, cereals, and the many things that make for good health.

The house was placed on a table covered with brown paper. With the aid of a large black crayon, ten roads were made leading to the house. These roads represented the ten good health habits, and each road was properly labeled. To make the roads more realistic, the children lined them with small pebbles they had collected. For seatwork they colored, cut, and mounted small figures representing the good health rules, these being placed on the various roads and some on the roof. Such a gay procession! Miss Spinach, tripping gaily down the "Eat Vegetables" road with Mr. Car-

rot and other vegetable friends; Mr. Toothbrush and the little Toothbrushes marching tall and haughtily down the "Brush Your Teeth" road! These little Healthland folks were watching for the people that were to occupy the house.

As each child brought back a card properly signed by his mother, showing that he had faithfully and willingly obeyed the good health rules for two weeks, his picture was placed in a window and he became a resident in the Good Health House. Soon joyous little faces began to appear at the windows until all were filled. Once a resident in the Health House, the children wanted to remain, so they had to continue to obey the good health rules or they must move. This ruling, made by the children, was a most effective one and brought good results.

CORRELATION OF SCHOOL SUBJECTS

1. *Language.* Stories contributed by children from time to time as the work progressed. These were made into charts for frequent use. Discussions were carried on as to the proper procedure in the project, and how the work was to be accomplished. These discussions gave ample opportunity for original language work.

It was necessary to teach a few rules of etiquette, such as not interrupting another's conversation, and waiting to be called on before offering suggestions.

2. *Number Work.* Counting of windows and paper pieces necessary for the blinds. Counting the children in the house from day to day and the number needed to fill the house. The measuring of the windows, doors, and blinds, and the paper necessary for covering the same.

3. *Music.* Good health songs.

4. *Handwork.* Pasting, coloring, cutting, and drawing.

5. *Reading.* The charts representing the progress of the project furnished excellent reading material.

EVALUATION OF THE PROJECT

The value of this project is threefold:

1. It is of value to the pupil, not only for the pleasure he receives in working on the project, but for the improvement in health. He is physically better, as was proved by comparing individual records before and after the project.

2. It is of value to the home. The child willingly obeys the good health rules for the privilege of living in the Health House, so relieving the parents of much coaxing and general unpleasantness.

3. It is of value to the school. The child, being in better physical condition due to following the good health rules, is better able to do his work.

MARGARET J. WALKER,
Lincoln School,
Framingham, Mass.

EDITORIAL COMMENT AND REPORT

THE TECHNIQUE OF TEACHING

The newer theories of teaching, such as are represented by such movements as the "socialized recitation," the "project method," "creative education," and "individual instruction," should not be thought of as supplanting all earlier theories of teaching, but rather as modifying earlier theories. One encounters zealous radicals who advocate throwing out all our earlier theory and practice, and hailing some new method as a panacea. The "five formal steps" was once hailed as such a panacea, and the attempt was made to make over all teaching on this plan. It failed, because this method was not appropriate for accomplishing some teaching purposes. It was appropriate, and still is appropriate, for certain purposes. The thing to do is to put it in its proper place, not to eliminate it entirely. "Drill" as a technique of teaching was once much overworked. The remedy for this situation is to use drill only where appropriate, namely, in developing habits, skills, and rote associations, and *limit its use* to such situations. There never has been a better method proposed for this purpose. Of course, the "drill" referred to here is drill from a modern point-of-view, where proper motivation is the first principle.

Some of the extremists in the "project method" and "creative education" movements give one this impression of their purpose. They seem to want to interest the pupil in certain activities and then let the pupil's learning take care of itself. The teacher is to be removed as much as possible from the situation. But will this prove desirable in the long run? Is not the teacher employed primarily because of her skill as a teacher, and is not her rôle in guiding and developing the learning of her pupils a very important one? It is readily granted that it is desirable for the learning of the pupils, within certain limits, to be self-directed, but the question is raised as to whether this, while important, is not a minor phase of the larger situation.

The teacher must be eclectic—she must choose the most appropriate method for the realization of each of her purposes as they emerge. They may be numbered by the hundred in a single day. She must have a sound philosophy of life and of education. She must have a thorough scholarship and scholarly ideals. But, above all, she must be a versatile artist perfected in a great variety of techniques and skills, which we know as the art of teaching, and which will insure a service that may well be calculated to educe a high type and quality of learning on the part of her pupils.

F. M. U.

WHAT ARE THE ESSENTIALS?

In periods of economic stress and retrenchment like the present, reaction toward a common school program made up of the three R's always appears. Many communities are witnessing this now. The phenomenon illustrates the power of tradition and shows how hard it is to plant new social conceptions so firmly that the first winds of adversity will not bowl them over.

The situation would be less difficult if school people themselves had been more discriminating in their use of the word "essentials." This has generally been applied to the older subjects of the school course and has been made to mean those skills and those facts which all pupils

throughout the nation should be expected to master. Reading, writing, spelling, and arithmetic, with places in geography and events in history, have made up the body of learning which has been scrutinized in order to determine what should be omitted and what retained in the school course. A considerable amount of research has been devoted to determining in a scientific way, if possible, what the irreducible minimum is.

It is natural that the patrons of the schools should take us at our word. They themselves submitted to a subject matter régime, and the point of view strikes them as familiar and perfectly sound. Only a comparatively few who have paid more than passing attention to school matters take any more profound view.

If essentials were interpreted in terms of the experience and growth of the pupils, the attitude of the rank and file of both teachers and parents would be different. This is, of course, being increasingly done and a better notion of essentials in common school education is gradually developing. Conduct is undoubtedly the all-important thing. The nursery schools understand this very well, but even at the level of three-year-olds pressure is sometimes brought to bear to induce teachers to introduce more formal subject matter. "The children should be learning to read and to write!" Small matter that the various complexes which unwise and unintelligent treatment has produced are gradually being corrected. A school is a school, isn't it?

At higher levels social life and conduct should still rank first. This cannot be suitably fostered in a school in which no serious work is done. But neither will it result from mere assignments and recitations in a formal program with a set schedule. In the last analysis emotional health and proper attitudes should be regarded as the essentials of education. Subject matter should be chosen and used because it fits into the plans of the school for establishing both. Such plans will not neglect growth in the skills necessary for effective social life, but they will place them in their true relations and provide for their adaptation to the needs of individuals and particular groups. The rapidly increasing number of institutions for persons suffering from nervous diseases is in itself convincing evidence of the great and pressing need in our time for education that makes for mental health. First things should come first.

J. F. H.

THE THIRD ANNUAL INSTITUTE FOR EDUCATION BY RADIO

That the ether is still in a somewhat troubled state was revealed at the meeting of the Third Annual Institute for Education by Radio, held at Ohio State University. Discussion of matters of presentation constituted the main emphasis of the meeting. The would-be radio speaker was advised to be himself and yet not to be himself. He was shown that attention to details such as rate of speech, choice of pronunciation, and other mannerisms would endear him to the radio listener. He was admonished that radio broadcasting is an art and that we must look at it in its total aspect, finding very little help from detailed analyses. Although there was much discussion—and one cannot say that this discussion solved the problems—yet it certainly helped to give research workers a view of the necessities of the practical side of broadcasting, and explained to the broadcasters the work which the investigators are doing and what they hope to achieve.

The first session was made memorable by Morse Salisbury, Chief of Radio Service, United States Department of

Agriculture. Mr. Salisbury described the language that should be used in approaching the American people over the radio. He also described the language which many speakers actually do use and unfortunately remain ignorant of the result.

Miss Elise Sprott, Liaison Officer, Women's Interest, British Broadcasting Corporation, contrasted British and American methods and helped to clarify thought on the fundamental assumptions in broadcasting. The subject of Miss Sprott's paper was, "Home Economics for British Housewives."

Meeting the week before the Republican Convention, the Institute took up, quite appropriately, the question of politics by radio. Miss Katharine Ludington, Chairman of the Radio Committee of the National League of Women Voters, and Mr. H. V. Kaltenborn, News Commentator and Political Analyst for the Columbia Broadcasting System, discussed this subject. Miss Ludington explained the care with which the League of Women Voters selects representatives for both sides of any question which it may take up in its radio programs. Both Miss Ludington and Mr. Kaltenborn voiced the opinion that there is considerable freedom of political discussion on the American radio. Mr. Kaltenborn intimated, however, that there were times when economic pressure was brought to bear upon speakers who chose unacceptable topics.

Considerable comment was occasioned by Professor D. A. Worcester's paper on, "What People Remember from Radio Programs." Doctor Worcester, who is Professor of Educational Psychology at the University of Nebraska, has made several studies on the memory of children and adults for broadcast materials. His results suggest the conclusion that radio speakers must decide clearly what they want to put across and use the best method possible in presenting the material.

Four round tables were held on particular subjects in order to organize the viewpoints of the persons attending the meeting. Miss Judith Waller, Director of Education for the Midwest Division of the National Broadcasting Company, led the round table on "Commercial Stations and Education." Mr. Joseph F. Wright, Director of Station WILL, University of Illinois, was leader of the section on "Financing College Stations." Doctor C. M. Koon, Senior Specialist in Radio, United States Office of Education, led a group on the subject of "Selecting Programs for Schools and Schools of the Air." Doctor Tracy F. Tyler, Executive Assistant and Research Director of the National Committee on Education by Radio, was in charge of the round table on "Techniques of Measurement."

Two other innovations for this year's program consisted in demonstration of school broadcasts and demonstration of the production of a radio play with preliminary auditions. The demonstration of broadcasts intended for schools included an Ohio School of the Air geography program, by Professor W. R. McConnell of Miami University; two social science broadcasts used in the Cleveland schools, given by Mr. William B. Levenson and Miss Mary Bratten of Nathan Hale Junior High School in Cleveland; and the Ohio State University Radio French Lesson, by Professor Robert Fouré of Ohio State University. Pupils from the Edison School, Grandview Heights, Columbus, and the Bexley High School listened to the radio programs and gave the audience an opportunity to observe the reactions which the pupils make to them.

Subjects of particular interest to educational institutions owning radio stations or putting on radio programs were taken

up by Dean Umberger, President Rightmire, Mr. Beaird, Superintendent Rule, and Doctor Tyler. Dean Umberger, who is Chairman of the Radio Committee of the Association of Land-Grant Colleges and Universities, spoke upon "The Influence of Radio Instruction upon Farm Practices." President Rightmire of Ohio State University gave a paper on "Measuring the Effectiveness of a College Station." Mr. T. M. Beaird, who is Executive Secretary of the Association of College and University Broadcasting Stations, laid out plans for "Coöperation in College and University Station Programs." Doctor Tyler, Executive Assistant and Research Director of the National Committee on Education by Radio, explained the procedure used in making the "Land-Grant College and State-University Survey." Superintendent Rule, of the Department of Public Instruction, State of Pennsylvania, formulated the "Pennsylvania Ten-Year Plan" for the use of radio as an educational means.

Other speakers than those already mentioned were Merrill Denison from Toronto, Canada, who spoke on "The Preparation of Dramatic Continuity for Radio"; Doctor W. V. Bingham, Chairman of the Psychology Committee of the National Advisory Council on Radio in Education, on "How to Prepare Radio Talks in Psychology"; Miss Margaret Cuthbert, of the Program Department of the National Broadcasting Company, on "The Personality of the Speaker in Educational Programs"; Miss Margaret Harrison, Special Investigator in Radio Education, Teachers College, Columbia University, on "Measures of the Effects of Radio Programs in Rural Schools"; Professor H. L. Ewbank, Chairman of the University Radio Committee at the University of Wisconsin, on "Methods of Presentation and Speech Suitable for Radio Use"; Mr. William J. DuBordieu, speaking for Professor George H. Betts, Director of Research of the School of Education, Northwestern University, on "Radio's Contribution to Religion in the United States"; Professor Joseph E. Maddy of the Department of Music, University of Michigan, on "Teaching Band Instruments by Radio"; Dr. Edgar Dale, Ohio State University, on "Preparing Radio Talks for School Children"; Mr. Franklin Dunham of the National Broadcasting Company on "Radio Plays and Their Use in the Schools"; Dr. C. M. Koon of the United States Office of Education on "Training the School-Teacher to Use Radio Programs"; Mr. E. D. Jarvis, Superintendent of Schools at Fort Recovery, Ohio, on "Teachers' Uses of the Ohio School of the Air Broadcasts"; Miss Alice Keith, for three years Director of the American School of the Air, on "School Broadcasts on a National Scale"; Mr. Neil D. Mathews, Principal of the James Ford Rhodes School, Cleveland, on "Social-Science Broadcasts for Cleveland Schools"; and Mr. F. H. Lumley, of Ohio State University, on "Measuring Audience Reaction to Radio Programs."

A special feature of the meeting was an International broadcast from London, through the courtesy of the Columbia Broadcasting System. Mr. Frank Roscoe, Secretary of the Teachers' Registration Council of London, spoke on broadcasting to schools in England.

The exhibit of radio material this year was enlarged by the addition of several displays from foreign countries. Material was received from the German Radio Corporation, the West-German Radio Company, the Central Committee for School Broadcasting in Germany, the Austrian Radio Company, Radio Paris, the International Institute for Intellectual Coöperation, the International Broadcasting Union, and the British Broadcasting Corporation.

F. H. Lumley.

STUDIES OF TRAINING SCHOOL PROBLEMS

The Supervisors of Student-Teaching are sponsoring several studies during the current year. There are two of particular importance. The first of these is a preliminary investigation of the status of training school curricula in elementary training schools. The work of the investigation is being done by Professor I. D. Payne, Director of Training, State Teachers College, Tempe, Arizona. The project assumes that further studies will be made until the whole field has been investigated. Director Payne has made considerable progress on the preliminary study.

The second project is the collection and publication of material on actual supervision of student-teaching. This was authorized by the Supervisors of Student-Teaching last year. The project contemplates the gathering of descriptions of supervision of student teaching from a selected group of institutions. The preliminary plans have been prepared and a list of 112 institutions, including all types of teacher preparing institutions, has been made from which the descriptions will be requested. All of the members of the Research Committee and of the Field Service Committee have coöperated in making the plans and in selecting the institutions included in the list. Several other persons also aided in this preliminary work. About forty men and women have made the choices represented in the final list.

There have been prepared a series of suggestions to guide in the preparation of the description. These have been mailed to the respective institutions with the request that the descriptions be prepared and mailed to the chairman of the Research Committee on or before January 1, 1933.

On behalf of the many workers in the preparation of teachers, and especially those working in laboratory schools, the Research Committee appeals to the various institutions to coöperate in these projects.

A. R. MEAD.

THE MONTESSORI TRAINING SCHOOL IN SPAIN

One of the first official acts of the new Spanish government in behalf of education has been the establishment of an international training course in the Montessori method of education. This will be conducted from February to June in Barcelona, the students being permitted to live in one of the palaces formerly belonging to royalty and having freedom of the park, library, and various other facilities. It is promised that the government will organize monthly trips to various historic points in Catalonia and the Balearic Islands.

There are two universities in Barcelona and these have been put at the disposal of Doctor Montessori, who will lecture at the central university and conduct her classes at the Universitat Industrial. The observation of children at work will be carried on at the "Casa degli Italiani."

Persons who are interested in the Montessori method and this international training school in Spain may correspond with the president, Manuel Ainaud, or the Director General, Maria M. Montessori, whose address is Ronda Universitat, 7, Barcelona.

A NEW TRAINING COURSE OF STUDY

The first bulletin resulting from a recent curriculum study on the part of the faculty of the State Teachers College at Farmville, Virginia, is organized in two parts. Part I is developed from the point of view of the grades, including the kindergarten, first, second, and third grades. Part II is organized from the point of view of the school subjects recognized in the Training School. The factors developed in Part I consist of a description of the situation in each grade made in such a way as to give the student

teacher a satisfactory orientation from the beginning; the general outline of the content of each grade; the materials and equipment of each grade; a list of suggested activities for pupils of each grade; and typical units of work in each grade described in retrospect and evaluated on the principles of method recognized in the Training School. The factors developed in Part II are the general objectives of the different subjects; the content of the subject for each grade; the specific objectives of each subject in each grade; the materials and equipment for teachers and pupils in dealing with the subjects; and standards of achievement in each subject for each grade.

The distinctive feature of this course of study is the treatment of the units of work. In most courses of study teaching units are incorporated merely as illustrations of procedure that have been used or might be used. In this bulletin, however, typical units are described as they have been taught in the Training School and in addition are evaluated on the basis of principles of method. This bulletin should be very helpful to all those interested in the principles and practices of curriculum-making.

BASIC READINGS IN THE SOCIAL STUDIES

The American Council on Education is responsible for the following announcement concerning methods in the Social Studies:

An experiment in social instruction has been launched by the American Council on Education. Under the series title "Achievements of Civilization" a number of short, attractive reading units have been published which are designed to supply pupils with accounts of the way in which social evolution has produced such institutions as the alphabet, number, weights and measures, the calendar, and governmental regulations.

Each unit is a single brochure of thirty-two or sixty-four pages, fully illustrated and written in a style which will appeal to pupils in the upper grades and the high school. The brochures furnish basic information which can be used in any one of a number of different ways—to supply pupils with interesting materials for free reading, to furnish classes in English and history with concrete ideas related to everyday life, to show pupils that subjects which are sometimes thought to be abtract and difficult, such as arithmetic, are designed to put them in possession of great intellectual inventions produced by long ages of human coöperation.

The brochures are not textbooks in the ordinary sense. Their use does not assume the establishment of a separate course in civics. They are prepared for the purpose of making it clear to pupils that all the subjects in the curriculum are social studies if they are properly understood.

The brochures contain scholarly information of the highest type expressed in the simplest language. The titles of the first three numbers of the series are "The Story of Writing," "The Story of Numbers," and "The Story of Weights and Measures." Brochures dealing with other social institutions are to be added to the series from time to time.

The prices for single copies are twenty cents for the first brochure and ten cents each for the second and third. Discounts are given on orders of twenty-five or more copies. The brochures can be secured by addressing the Committee on Materials of Instruction of the American Council on Education, 5835 Kimbark Avenue, Chicago, Illinois.

THE READER'S GUIDE

IN HONOR OF DOCTOR WOOD

On the occasion of his retirement from active service in Teachers College, a group of his friends have selected and published a volume of excerpts from the addresses of Professor Thomas D. Wood.[1] As everyone knows, the present progressive program of health and physical education in the schools of the United States is chiefly his work. For many years chairman of the National Joint Committee on Health Education, representing both the National Education Association and the American Medical Association, Professor Wood exercised a wide influence. The reports of that committee laid the foundation of present approved practice. Several of the addresses drawn upon for materials for this commemorative volume were delivered at meetings at which this committee made reports or at meetings of the National Society for the Study of Education and other similar societies.

Dean William F. Russell, in his introduction to the volume, says truly that although Professor Wood was a specialist, he was also an educator with a broad view of life. These trenchant passages from his addresses, beautifully and appropriately printed, will be highly prized by Professor Wood's friends and followers, who are legion.

J. F. H.

AN INTRODUCTION TO EDUCATION

Blackhurst's new book[2] is the third to appear this year, making a total of nine or ten now in the field, that can be used in introductory courses in education. The first book to appear was Judd's *Introduction to the Scientific Study of Education*, in 1918. No other book in this field appeared until 1924, when Frasier and Armentrout wrote *An Introduction to Education*. Within a year there appeared three: Bagley and Keith, Dearborn, and Cubberley. After an interval of five years, a fifth book appeared by Clapp, Chase, and Merriman. In 1931, Frasier and Armentrout brought out a book of readings entitled *An Introduction to the Literature of Education*. This year three new books have appeared, one by Adams and Taylor, another by Schutte and his twenty-two contributors, and Blackhurst's *Introducing Education*.

The material that Blackhurst presents is similar to that found in the other books in the field. There is one notable exception to this. Chapter II is entitled "How to Study" and occupies over 18 per cent of the entire book. This chapter contains many valuable suggestions and helps for the beginning student. The question, however, may be raised as to the appropriateness of this material in this type of book. It is unrelated to the remainder of the book's content with the possible exception of the author's presentation of the laws of learning in Chapter VI, entitled "Psychology as a Background for Education."

The book is unusually well written for teaching purposes. The context and style are nicely adapted to the abilities of beginning students. The opening chapter gives a preview of the entire book. The objectives of each chapter are clearly stated in the initial paragraphs, and at the close appears a summary. The diagrams, graphs, maps, and charts presented in this book are unusually clear and should serve

[1] *Selections from Addresses of Thomas D. Wood.* Privately published, 1932.
[2] *Introducing Education.* By J. Herbert Blackhurst. Longmans, Green and Company, 1932.

as valuable teaching devices. Pictures are used to advantage in contrasting old and modern school buildings, and the progressive and traditional schoolroom equipment.

The author follows the same unusual procedure found in one of the earlier books in this field in presenting pictures of living educators. What is more unusual is the picture of a woman educator! Patty Smith Hill, of Columbia University, shares this distinction. Among the living educators we find the pictures of Dewey, Bagley, Terman, Thorndike, Kilpatrick, and Cattell. In addition to these we find pictures of Herbart, Spencer, James, Eliot, and Charles McMurry.

An interesting workbook has been prepared to accompany the text, which should provide, in the opinion of the reviewer, a much needed supplement. Provision in the workbook is made for required and extra credit assignments, objective tests, and vocabulary study. *Introducing Education* is the latest addition to Longmans' Education Series, edited by Frederic B. Knight, and maintains the same high standard of artistic book-making which has characterized the books in this series.

W. D. ARMENTROUT

REMAKERS OF MANKIND

About a generation ago a rumor was current in Cambridge that one of the dons was engaged in preparing a book to be entitled "Great Emperors That I Have Met." In his *Remakers of Mankind*,[3] Doctor Carleton Washburne presents the results of his interviews with "statesmen, professors, teachers, heads of normal schools, writers, and even admirals," from whom he sought to obtain opinions on some of the major issues in modern education—the social aim, nationalistic and international aims, the teaching of nationalistic history, freedom of discussion in the schools, internationalism as an aim in education, and the nature of the curriculum. Doctor Washburne, through a questionnaire which he sent in advance of his visit, also intended to secure the views of the Remakers of Mankind on "mental hygiene" or "integration of personality"; to Doctor Washburne's surprise, many of those interviewed did not understand these terms. One wonders how many American educators could define them satisfactorily!

Doctor Washburne's account of his interviews is interestingly presented with just the right amount of background of national setting, local politics, and personalities to make his contribution picturesque and colorful. If, however, one were asked to give a general summary or an average, as it were, of the results of the interviews as a guide to practice, he would be hard put to it to find any other answer than that of the gubernatorial candidate in the recent moving picture, "The Dark Horse." This summary would be "Well, yes—and again, No." All of which simply means that the Remakers of Mankind are human and that the true springs of educational theory and practice rise out of national cultures and backgrounds and are colored by the social environment. Because of the gap or "lag" between the ideals that the Remakers of Mankind may set before themselves and the aims and practices which the Makers of Mankind—the educational administrators and classroom teachers—must live by, it would have been interesting if Doctor Washburne had gone further and discussed the methods by which this gap can be bridged, or, in other words, how the Remakers of Mankind propose to give their ideals reality. It does not, however, seem to have been part of Doctor Washburne's program to visit schools during the course of his latest investigation. Like the Scotchman who was asked, after a visit to

[3] *Remakers of Mankind.* By Carleton Washburne. John Day Company, 1932.

England, what he thought of the English, Doctor Washburne could answer that he interviewed only "the heads of departments."

I. L. KANDEL

A NEW PSYCHOLOGY

Recent years have seen momentous changes in science. Atomistic and mechanistic views of the universe have been widely challenged. Relativity changes the very nature of physics, and the organismic view that of biology. The gestalt concept modifies much psychology. Asserting that new views find their way but slowly into the field of Education, the authors of a new text in educational psychology[4] undertake to present a reinterpretation of experimental data in the light of newer conceptions of life, growth, and education. It is pointed out that uncritical assumptions often dictate interpretation of experimental data. Facts neither prove themselves nor a theory. The two evolve together.

Having pointed out the danger of uncritical acceptance of basic principles, the authors are in the difficult position of presenting the reader with a large number of new assumptions for acceptance. While supporting evidence and background are briefly illustrated and clearly indicated, space prohibits elaborate support for the new principles. A fair background in biology and sociology is assumed, which will make use of the book in many normal schools difficult. In college classes, where such background is usually present, the material should be extremely stimulating.

The attempt to apply the new assumptions and principles to the interpretation of experimental data is honest and thoroughgoing. This makes the book difficult reading for a few chapters until the reader fully grasps the new basis. Individuals enamored of the idols of their forefathers will not be able to read it at all! The open-minded reader will find the discussion unusually interesting and extremely stimulating.

In refreshing contrast to the frequent emphasis in educational psychology classes upon collection of "objective" facts, the authors suggest:

> The student is unable to grasp even the basic elements of the new Biology and Psychology without being told why his common sense conceptions are wrong. Unless the logic of his preconceptions is pointed out to him and contrasted with the basis of the new interpretation, he inevitably misunderstands the actual facts of experiment. Indeed they have little or no meaning for him. For this reason he is obliged to unlearn much that he thought was true, before he can learn what, in the light of present knowledge, seems the truer picture. Until he acquires the ability to inspect his assumptions, he makes no progress. To develop in him this ability is the task of instruction. (Page ix.)

In an era of counting, measuring, and saving civilization by means of coefficients carried to the fifth decimal place, it is well to recall attention to thinking about the meaning of these things. Thinking about facts is fully as important as gathering facts—and much more difficult.

The task of the teacher is seen as the development of personality. The specialized learning processes involved in mastering curriculum subjects are subordinated to and conditioned by the whole learning process of the individual. The balance between the institutions of society and the nature of the individual is maintained in interesting and convincing manner.

The treatment begins with an interpretation of the nervous system in the light of new principles. The learning process, from

[4] *Principles of Mental Development.* By Raymond Holder Wheeler and Francis Theodore Perkins. Thomas Y. Crowell Company, 1932.

that found in lower animals up to that of adult humans, is presented through the analysis of ample experimental data. As would be expected, the interpretations are distinctly different from the traditional. Many of the studies quoted have not found their way into standard texts, hence make interesting reading. This background before the student, the volume continues with an analysis of the learning process in children, and ends with the specialized learning processes involved in school subjects.

The present reviewer can foresee considerable disagreement with the book on the part of many psychologists. On the other hand, the progressive wing among educators will welcome it, as it is clearly the most able exposition on a scientific basis of the psychology underlying what is known as the progressive movement. As indicated above, the reviewer feels that many normal school classes would make heavy going of the material, but that in college classes with requisite background the volume would prove extremely valuable.

The chief and only major criticism the present reader would advance concerns form rather than content. Unusually well written, the book is rather poorly edited. Just why certain paragraphs come where they do, why certain sequences of material are arranged as they are, was not at all clear. Thought was seriously interrupted several times. This is puzzling, since the actual exposition within a given topic is unusually clear and lucid.

The volume is to be recommended without hesitation as an excellent text for college classes prepared for the newer interpretations, and as a stimulating piece of reading for educators.

W. H. BURTON

VOCATIONAL GUIDANCE

The report of the Subcommittee on Vocational Guidance of the White House Conference[5] is based on an examination of existing practices made through a questionnaire sent to public school administrators in 288 cities with a population of 25,000 or more (150 of whom gave usable information), supplemented by a survey of technical literature on educational and vocational guidance. Section I deals with: Study of the Individual, Counseling, Scholarships, Occupational Studies, and Curriculum Work. Information is given concerning the number of the reporting schools that carry on the various activities, the number of counselors employed, amount of time they devote to guidance, number of classes in Occupations and their place in the curriculum. Descriptions of programs in various communities illustrate the principles involved.

The treatment of occupational studies consists of a brief review of the efforts to gather information about occupations which various bureaus have exerted. There is a comprehensive list of occupational pamphlets prepared since 1920.

Section II, entitled "Individualized Opportunities for Vocational Training," treats of the provisions that should be made in communities for training in the occupations.

Section III, "Junior Employment Service," presents the problems which young people face in finding jobs, and supports the thesis that more adequate facilities should be provided for free junior placement. This should be not merely a job-finding service but an attempt to "place young people in suitable positions, with intelligent appreciation of opportunities ahead, taking into account, so far as pos-

[5] *Vocational Guidance—Principles and Practice.* White House Conference on Child Health and Protection. Report of Subcommittee on Vocational Guidance; M. Edith Campbell, Chairman. Century Company, 1932.

sible, their abilities, education, and physical condition."

Section IV treats of "Special Problems in Vocational Guidance": Boy Scouts, Indians, Negroes, Social Service Organizations, such as the Y.M.C.A.; the role played by service clubs, such as Kiwanis, etc. Brief treatment is accorded to problems peculiar to rural youth, and to statewide programs for vocational and educational guidance.

There is a voluminous bibliography. Seven appendices contain forms used for the keeping of various records, state regulations concerning the certification of counselors, outlines for use in making investigations of occupations, etc. A number of interesting illustrations are scattered through the book.

This volume, prepared under the auspices of the White House Conference, should exert a considerable amount of influence on future developments in vocational guidance. Serving as a portrait of existing conditions, it will furnish a norm against which can be checked the progress in the future. For example, the report shows the proportionate number of counselors and students in certain cities at the present time. (New York City, for instance, is shown as having one counselor for every 35,000 pupils of counseling age—Grades 7 to 12—while Long Beach, California, has one for every 500). Twenty-one school systems report that their counselors are on special licenses or certificates. It will be possible to measure the growth in these respects by a similar survey conducted a decade or two hence.

A most valuable feature of the work is the series of recommendations which follow each section. These succinct statements should serve as a guide to communities that are looking for proved ways in which to provide for the vocational guidance of their youth. The entire volume should focus public interest and crystallize action in this field.

HARRY D. KITSON

SIGNIFICANT ARTICLES

WHAT IS A PROGRESSIVE SCHOOL?

The *Journal of Education* of October 17 presents a symposium on the question, "What is a Progressive School?" Burton P. Fowler of the Tower Hill School at Wilmington, Delaware, answers by saying that progressive education places its emphasis on "development as a self-active process under teacher guidance." A four-fold type of procedure is followed, namely: (1) provision for interrelated physical, mental, and emotional needs; (2) organization of many experiences in group relationships; (3) providing opportunity for the expression of children's basic interests; (4) regarding the home as an even more vital factor in education than the school.

Henry W. Holmes, Dean of the Harvard Graduate School of Education, puts it in terms of substitution for external and artificial ways of keeping school of freedom of environment for children in natural and lifelike situations. "The essence of progressivism is the liberation of a child's energies in natural ways so that he actually lives while he learns."

Answers by George F. Arps of Ohio State University, Eugene R. Smith of Beaver Country Day School, Alexander C. Roberts of State Teachers College at San Francisco, A. L. Threlkeld, Superintendent of Schools in Denver, and J. Asbury Pitman of State Teachers College at Salem, Massachusetts, are in substantial accord with these statements. The symposium is to be continued in future issues of the journal.

OUR DEBT TO PRINTING

At the Eleventh Annual Conference on Printing Education, held in Washington

in June, Associate Superintendent William E. Grady of the New York public schools read a paper on "Education's Obligation to Printing." This appears in *School and Society* for October 22. After an eloquent introduction, in which the development of printing is compared with the invention of the compass and of gunpowder, references were made to great literature from Tennyson to Joyce Kilmer. Mr. Grady then proceeded to point out that the great blessing of printed books has, through short-sightedness of schoolmen, been permitted to lapse into scholastic verbalism with the result that now educational reformers are seeking to create child-centered rather than book-centered schools. The weakest aspect of our prevocational and vocational activities is a lack of correspondence with the methods and the needs of industry. There is great difficulty in securing teachers of printing who can give really practical instruction. We are obliged, however, to educate consumers as well as producers. This is being attempted through printing classes in the schools. The school and industry should recognize their mutual responsibility.

THE WORK OF THE VICE PRINCIPAL

The September-October number of the *Baltimore Bulletin of Education* is devoted to a series of articles on the work of the vice principal. Carleton E. Douglass, Assistant Superintendent in charge of intermediate grades, explains why vice principals have been placed in the larger schools in that city. The principal is called upon to work out definite plans for the participation of the vice principal in the activities of the school as a preparation for his future work as principal. There is a special opportunity for scientific study on the part of the vice principal in real problems arising in school practice. The article is given definite point through the presentation of samples of schedules followed by vice principals.

Other articles in the series are devoted to the training of the vice principal, reports by principals as to how the vice principals share in the responsibilities of their schools, including, in addition to reports from elementary schools, a report from junior high school.

WHAT THE "GENES" LOOK LIKE

All teachers have some idea of the importance of heredity in contrast to environment in accounting for the individual differences of children and adults. They will be interested, therefore, in an article in *Science Education* for October on "'Genes'—the Units of Heredity," taken from the *News Service Bulletin* of the Carnegie Institution of Washington. The article presents photographs of microscopic slides showing the actual arrangements of chromomeres and the genes which they contain. The examples are taken chiefly from Dr. Belling's study of the pollen of the lily but the illustrations include also the house fly, salamander, grasshopper, and other plants and animals. The work of Professor T. H. Morgan, of Columbia University, on the fruit fly is reviewed and the statement is made that the hypotheses set up by him and by other earnest investigators are confirmed by these recent studies in which the minute cellular bodies that are believed to be determiners of human characteristics in the individual are definitely shown.

THE TEACHER AS PHILOSOPHER

In *School and Society* of October 1, Sir John Adams writes in his usual stimulating fashion of the teacher as philosopher. He points out that in education we have been slow to give philosophy a place in the training curriculum. It has been thought of as a subject for the universities. Even today many philosophers are somewhat reluctant

to have their subjects coupled with practical issues. At the best universities, however, philosophy and education have been combined, as Sir John thinks, satisfactorily. One mistake made is that of supposing that a short and superficial introduction to philosophy must be given before the philosophy of education as such can be taken up. This he thinks entirely beside the point. Teachers have definite questions of their own in the field of philosophy and should attack them directly. A great many excellent books and courses are now doing this. Indeed, long before this type of work appeared in the universities the best of the normal school faculties had already begun to treat philosophy in an informal way. Even such books as *Jean Mitchell's School* and *The Evolution of Dodd* should be counted in as philosophy, however informal and elementary. As a matter of fact, many teachers learn much from both of these books.

THE NEW BOOKS

Our Children. Edited by Dorothy Canfield Fisher and Sidonie Matsner Gruenberg. Prepared and Sponsored by the Child Study Association of America. New York: Viking Press, 1932. Pp. 348. $2.75.

Parents and Sex Education. By B. C. Gruenberg. New York: Viking Press, 1932. Pp. 112. $1.00.

Educations for Political Citizenship. By David Snedden. New York: Teachers College, Columbia University, 1932. Pp. 196. $2.50.

Rating School Pupils. By Charles Russell. New York: Teachers College, Columbia University, 1932. Pp. 74. $1.25.

Karl and Gretel. By Virginia Olcott. Newark: Silver, Burdett and Co., 1932. Pp. 168. Illus. $.80.

Creative Writing of Verse. By H. Augustus Miller, Jr. New York: American Book Co., 1932. Pp. 190.

Achievement in the Junior High School. By Bancroft Beatley. Cambridge, Mass.: Harvard University Press, 1932. Pp. 92. $2.00.

Using English, Book Two. By Luella B. Cook. New York: Harcourt, Brace and Co., 1932. Pp. 594. $1.60.

An Introduction to the History of the Social Sciences. By Henry Johnson. New York: Scribner's Sons, 1932. Pp. 145. $1.25.

Proceedings of the Seventieth Annual Meeting, Atlantic City, New Jersey, June 25–July 1, 1932 (Volume 70). Washington, D. C.: National Education Association, 1932. Pp. 992.

The Technique of Progressive Teaching. By A. Gordon Melvin. New York: John Day Co., 1932. Pp. 405. $2.95.

IN PAPER COVERS

The Modern School Achievement Tests. By Arthur I. Gates, Paul R. Mort, *et al.* New York: Teachers College, Columbia University, 1932.

Providence Inventory Test in Music. By Richard D. Allen, Walter H. Butterfield, and Marguerite Tully. Yonkers, N. Y.: World Book Co., 1932. Form A, per package of 25, net $1.10.

Prevention of Automobile Accidents. By Victor W. Page. New York: Norman W. Henley Publishing Co., 1932. Pp. 172. Illus. $.50.

Good Writing. By Burges Johnson. Syracuse N. Y.: Director of Public Relations, Syracuse University, 1932. Pp. 76. $.50.

Report of the Survey of the Schools of Chicago, Illinois. Volume I: Administration; Business Management; Financing the Schools; Educational Personnel; Social Services; pp. 350. Volume II: Fitting the School to the Pupil; Secondary Education; Higher Education; pp. 323. Volume III: Curricula; Teaching and Supervision in the Elementary Schools; Health and Physical Education; Vocational Education; pp. 227. Volume IV: Housing the Schools; Operation of the School Plant; pp. 315. Volume V: Summary of Findings and Recommendations. School Survey Series, Division of Field Studies, Institute of Educational Research, Teachers College, Columbia University, New York City, 1932.

A Course of Study in Reading, Grades IV–VI. Chicago: Board of Education, 1929. Pp. 200.

Dare the School Build a New Social Order? By George S. Counts. New York: John Day Co., 1932. Pp. 56. $.25.

College Prolongs Infancy. By Horace M. Kallen. New York: John Day Co., 1932. Pp. 28. $.25.

Silent Reading and Problem Book in Geography, Grade VII. By O. Wendell Hogue and Magretta Baker. Syracuse, N. Y.: Bardeen School Supplies, Inc., 1932. Pp. 80.

The 1932 College Sophomore Testing Program. Report by the Advisory Committee on College Testing. Washington, D. C.: American Council on Education, 1932. Pp. 54.

Honor to George Washington and Reading about George Washington (Pamphlets 1 to 16 complete); pp. 198. *Programs and Papers;* pp. 58. *Handbook of the George Washington Appreciation Course;* pp. 65. Washington, D. C.: United States George Washington Bicentennial Commission, 1932.

Bulletins of the Federal Board for Vocational Education, Washington, D. C.: No. 121, *Proceedings of the Fourth National Conference on Vocational Rehabilitation of the Disabled Civilian;* pp. 144. No. 148, *Vocational Guidance in Rehabilitation Service;* pp. 55. No. 162, *Vocational Training Costs;* pp. 34. No. 165, *Training Teachers in Supervised Farm Practice Methods;* pp. 125.

United States Department of the Interior, Washington, D. C.: Bulletin, 1931, No. 20, *Biennial Survey of Education in the United States, 1928–30,* by Emery M. Foster; pp. 12. Bulletin, 1932, No. 1, *Educational Directory, 1932;* pp. 162. Pamphlet No. 30, *State Legislation Relating to Kindergartens in Effect, 1931,* Mary Dabney Davis and Ward W. Keesecker; pp. 30.

United States Department of Commerce, Washington, D. C.: Miscellaneous Publication No. 135, 1932: *The International Metric System of Weights and Measures;* pp. 13; $.05.

United States Department of Labor, Washington, D. C.: Children's Bureau, Publication No. 210, *Employment of Mentally Deficient Boys and Girls,* by Alice Channing; pp. 107.

A Study of Language Expression in the Elementary School. Second Yearbook, Raleigh Elementary Education Council. Raleigh, N. C.: Public Schools, 1932. Pp. 223 (mimeographed). $1.00.

The Clapp-Young Self-Marking Tests: *The Carnegie Mental Ability Tests* (for colleges and high schools), *Form A,* and *Answer Booklet. The Clapp-Young English Test, Forms A and B. Answer Booklet No. 2* (for any multiple choice test). *Clapp's Test for Correct English, Form A. The Nelson-Denny Reading Test* (for colleges and senior high schools), *Vocabulary and Paragraph, Forms A and B* (with answer booklets). *The Nelson Silent Reading Test, Vocabulary and Paragraph* (for Grades 3 to 8), *Forms A and B* (with answer booklets). *Nelson's High School English Test* (for junior and senior high schools), *Forms A and B* (with answer booklets). *Purdue Placement Test in English* (for colleges and senior high schools), *Forms A and B* (with answer booklets). *The Shepherd English Test* (for college freshmen), *Forms A and B* (with answer booklets). Boston: Houghton Mifflin Co., 1932.

The Cleveland English Composition and Grammar Test, Forms A and B (Grades 7 to 12). Boston: Houghton Mifflin Co., 1932.

Howe-Kyte Diagnostic Record of Teaching (with Manual of Directions). By George C. Kyte. Boston: Houghton Mifflin Co., 1932. $.15.

Survey Data Book for Public School Janitorial-Engineering Service. By N. L. Engelhardt, Charles E. Reeves, and George F. Womrath. New York: Teachers College, Columbia University, 1932. Pp. 75.

Looseleaf Notebook for My Weekly Reader. New York: American Education Press, Inc., 1932.

Facts on School Costs. Research Bulletin of the National Education Association, Washington, D. C., Vol. X, No. 5, November, 1932. Pp. 32.

Information Bulletin. League of Nations' Intellectual Co-operation Organisation, Paris, France, April, 1932. Pp. 32.